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STATUE OF KING CHARLES I., CHARING CROSS.
DRAWN BY MUIRHEAD BONE.

SEE NOTE ON PAGE 181.

The Campanile of San Marco and The Loggetta of Sansovino.

THE bell-towers of Venice, of which St. Mark's was, if not the earliest, certainly the finest specimen, are not only a characteristic feature in that city of characteristic architecture, but they display peculiarities of form which distinguish them both from the round Campanili of Ravenna and from the Lombard type of Campanile prevalent throughout North Italy. The Lombard Campanile—whether we take St. Satiro in Milan, dating from the ninth century, or that noblest specimen, the tower of Pomposa, near Comacchio, built in 1063—invariably has its shaft divided horizontally into sections or zones. Each zone is usually pierced by one, two, three, or four apertures, and is adorned at the top by a series of hanging arches (*archetti pensili*), sometimes hanging free for the whole width of the tower, sometimes carried on slightly-projecting pilasters. The bell-chamber is essentially a part of the shaft, and is, in fact, the last zone into which the shaft is divided.

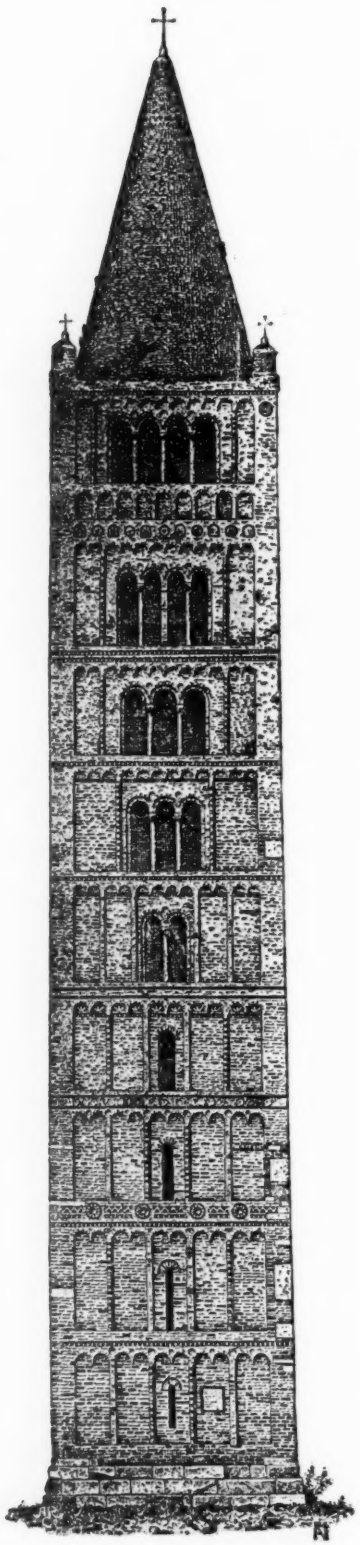
The Venetian bell-tower, on the other hand, is not divided into zones. It is a square shaft of brick, unpierced except for small windows near the angles, which serve to light the internal stair. It has for ornament pilasters running up the whole height of the shaft and connected with one another by arches. Where you find the hanging arch on a Venetian Campanile, as at Torcello, there has been a deviation from the pure Venetian type and an admixture of the Lombard style. The bell-chamber, again, is not an essential part of the Venetian shaft. It has been placed as a separate structure on the top of the shaft.

Like so much else in Venetian architecture, the form of the Venetian Campanile may be traced to the Levant, for the Venetian bell-tower is nothing but the protection-tower of a monastery such as those on Mount Athos, with a bell-chamber added. In Curzon's "Monasteries of the Levant" (1881, p. 8), there is a drawing of the Monastery of St. Paul, which shows us two towers exactly like Venetian Campaniles without the bell-chamber. These towers were "built for the defence of the monastery, not as belfries;" and perhaps a reminiscence of their ancient purpose may be seen in the fact that the Venetian Campanile usually stands away from the church—is not attached to it—was, in short, still considered as a place where the clergy with the holy vessels could take refuge from plunder or from fire.

Nothing certain is known as to the exact date when the Campanile of St. Mark was founded. Sansovino, without citing authority, but really following the *Cronaca Scivos*, declares that the foundations were laid in the year 888. Gallicciolli gives the year 911, relying on the chronicler Feroldo, who states that the Republic, which had grown in wealth, began to coin silver money, and determined to lay the foundations of the great Campanile; this date is supported by Zuliani, who, writing as late as 1692, says that in the year 911 "the foundations of the Campanile were laid with spurs (*speroni*), which, running out round them like a star and extending in all directions, held the central foundation firm." Romanin is inclined to accept the date 911, but adds that the building of the actual tower did not begin till 940. Vasari, in his life of Arnolfo di Lapo, ascribes the foundation of the Campanile to the master builder Buono of Bergamo, and assigns the event to the year 1152; but clearly he is confounding the beginning of the tower with its completion, which seems to have taken place in 1148.

The wide discrepancy of the dates, 888 to 1148, may perhaps be accounted for by the conjecture that the work of building proceeded slowly, either with a view to allowing the foundations to consolidate, or owing to lack of funds, and that the chroniclers recorded each resumption of work as the beginning of the work. One point may, perhaps, be fixed. The Campanile must have been some way above ground by the year 977, if the hospital founded by the sainted Doge, Pietro Orseolo, which is said to have been attached to the base of the tower, was consecrated in that year. The Campanile was finished, as far as the bell-chamber at least, in 1148, under the Doge Domenico Moresini, whose sarcophagus and bust surmount the portal of San Nicolò del Lido.

The chroniclers are at variance among themselves as to the date of the foundation, nor has an examination of the foundations themselves led to any discovery which enables us to determine that date; but one or two considerations would induce us to discard the earlier epochs. The foundations must have been designed to carry a



THE CAMPANILE OF POMPOSA.

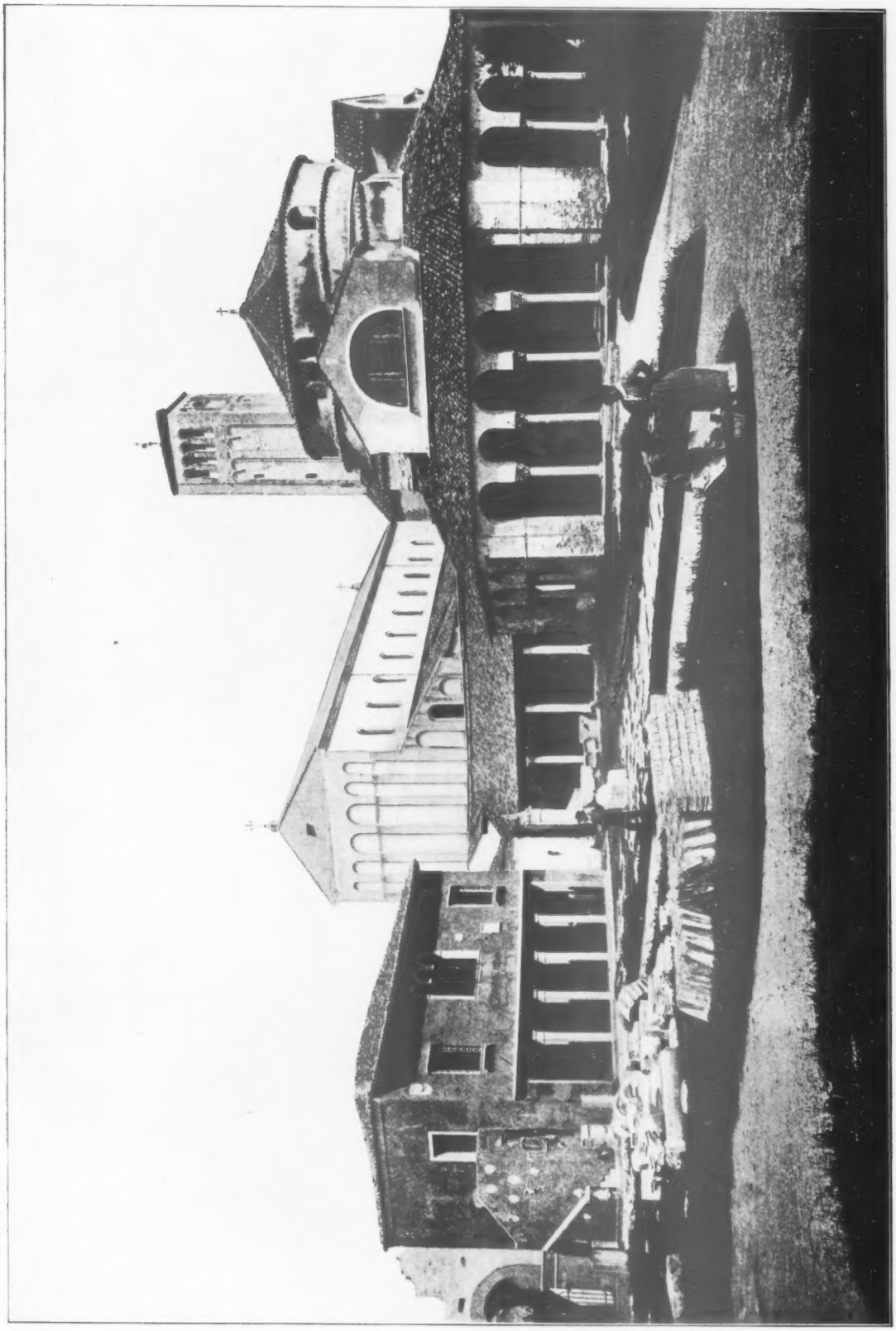
(After Cattaneo, in Ongania's *Basilica di San Marco.*)

tower of the same breadth, though possibly not of the same height, as that which has recently fallen. But in the year 888 had the Venetians such a conception of their greatness as to project a tower far more massive than any which had been hitherto constructed in Italy? Did they possess the wealth to justify them in such an enterprise? Would they have designed such a tower to match St. Mark's, which was at that time a small church with walls of wood? It is more probable that the construction of the Campanile belongs to the period of the second church of St. Mark, which was begun after the fire of 976 and consecrated in 1094.

The height of the Campanile at the time of its fall was 98·60 metres (322 ft.), from the base to the head of the angel, though a considerable portion of this height was not added till 1510; its width at the base of the shaft 12·80 metres (35 ft. 2 in.), and one metre (3 ft. 3 in.) less at the top of the shaft. The weight has been calculated at about 18,000 tons.

Thanks to excavations at the base of the tower made by Com. Giacomo Boni, at the request of Mr. C. H. Blackall, of Boston, U.S., in the year 1885, a report of which was printed in the "Archivio Veneto," Tom. xxix., p. 355, we now possess some accurate knowledge about a portion of the foundation upon which this enormous mass rested. The subsoil of Venice is composed of layers of clay, sometimes traversed by layers of peat, overlying profound strata of alluvial sand. This clay is, in places, of a remarkably firm consistency; for example, in the quarter of the town known as *Dorsoduro* or "hard-back," and at the spot where the Campanile stood. Signor Boni reports that a bore made at that point brought up a greenish, compact clay mixed with fine shells. This clay, when dried, offered the resisting power of half-baked brick. It is the remarkable firmness of this clay bottom which enabled the Venetians to raise so lofty and so ponderous a structure upon so narrow a foundation.

The builders of the Campanile proceeded as follows:—Into this bed of compact clay they first drove piles of about 9½ in. in diameter with a view to still further consolidating, by pressure, the area selected. That area only extends 1·25 metre, or about 4 ft. beyond the spring of the brickwork shaft of the tower. How deep these piles reached Signor Boni's report does not state. The piles, at the point where he laid the foundations bare, were found to be of white poplar, in remarkably sound condition, retaining their colour, and presenting a closely twisted fibre. The clay in which they were embedded has preserved them almost intact. The piles extend for one row only beyond



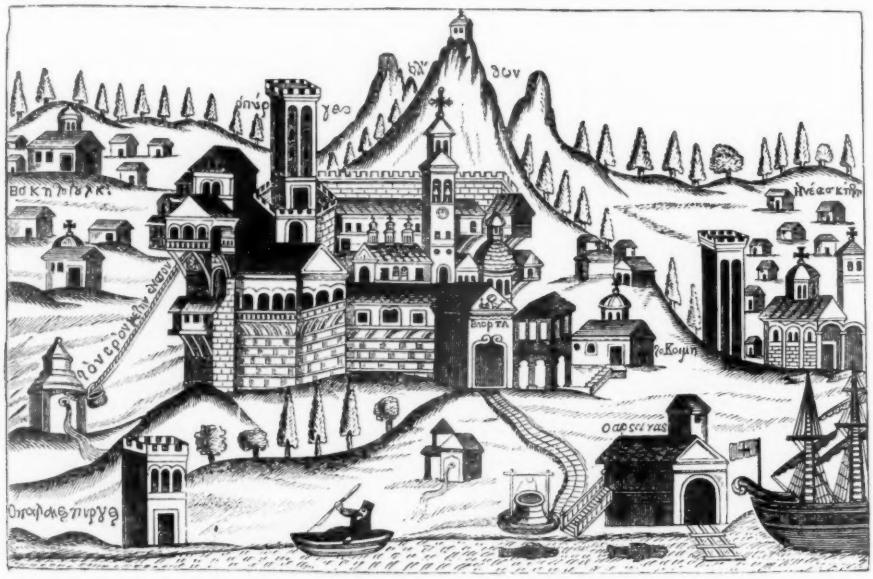
TORCELLO.

the superimposed structure. On the top of these piles the builders laid a platform consisting of two layers of oak beams, crosswise. The lower layer runs in the line of the Piazza, east to west, the upper in the line of the Piazzetta, north to south. Each beam is square and a little over 4 in. thick. This oak platform appears to be in bad condition; the timbers are blackened and friable. While the excavation was in progress sea-water burst through the interstices, which had to be plugged.

Upon this platform was laid the foundation proper. This consists of seven courses of stone of various sizes and of various kinds—sandstone of two qualities, limestone from Istria and Verona, probably taken from older buildings on the mainland, certainly not fresh-hewn from the quarry. The seventh or lowest course is the deepest, and is the only one which is escarped, and that but slightly; the remaining six courses were intended to be perpendicular. These courses vary widely from each other in thickness—from 0·31 to 0·90 centimetres. They are composed of different and ill-assorted stone, and are held together in places by shallow-biting clamps of iron, and by a mortar of white Istrian lime, which, not being hydraulic, and having little affinity for sand, has become disintegrated. Signor Boni calls attention to the careless structure of this foundation proper, and maintains that it was designed to carry a tower of about two-thirds of the actual height imposed upon it, but not more.

Above the foundations proper came the base. This consisted of five courses of stone set in stepwise. These courses of the base are all of the same kind of stone, in fairly regular blocks, and of fairly uniform thickness. They were all intended to be seen, and originally rose from the old brick pavement of the Piazza; but the gradual subsidence of the soil—which is calculated as proceeding at the rate of nearly a metre per 1,000 years—has caused two and a half of these steeped courses to disappear, and only two and a half now emerge from the present pavement.

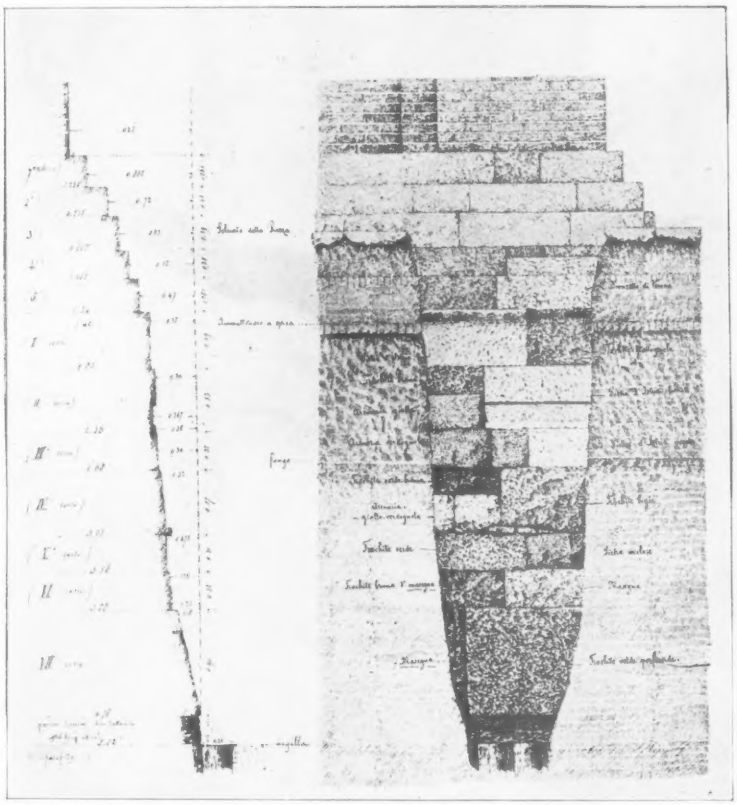
Thus the structure upon which the brick shaft of the Campanile rested is composed of (1) the base of five-stepped courses, (2) the foundations of seven courses almost perpendicular, (3) the platform of oak beams, and (4) the piles. The height of the foundation, including the base, is 5·02 metres, about 16 ft., or one-twentieth of the height they carried. Not only is this a very small proportion, but it will be further observed that Signor Boni's excavation seems to destroy the tradition of star-shaped supports (*speroni*) to the foundations, and shows them to cover a very restricted area. In fact, the foundations of the Campanile belong to the primitive or narrow kind. The foundations of the Ducal Palace, on the other hand, belong to the more recent or extended kind. Those foundations do not rest on piles, but on a very broad platform of larch beams—much thicker than the oak beams of the Campanile platform—reposing directly on the clay. Upon this platform foundations with a distended escarpment were built to carry the walls, the weight of which was thus distributed equally over a wide area.



THE MONASTERY OF ST. PAUL, ON MOUNT ATHOS.
(Reproduced from Curzon's "Monasteries of the Levant," by permission of Mr. John Murray.)

Signor Boni thought from his examination of the clay in 1885 that the foundations of the Campanile were good, but it is conceivable that some movement may have taken place since that date, either in the clay stratum itself or in the sand upon which it lies. In any case nothing certain as to the present condition of the foundations can be known until the heap of ruin is cleared away.

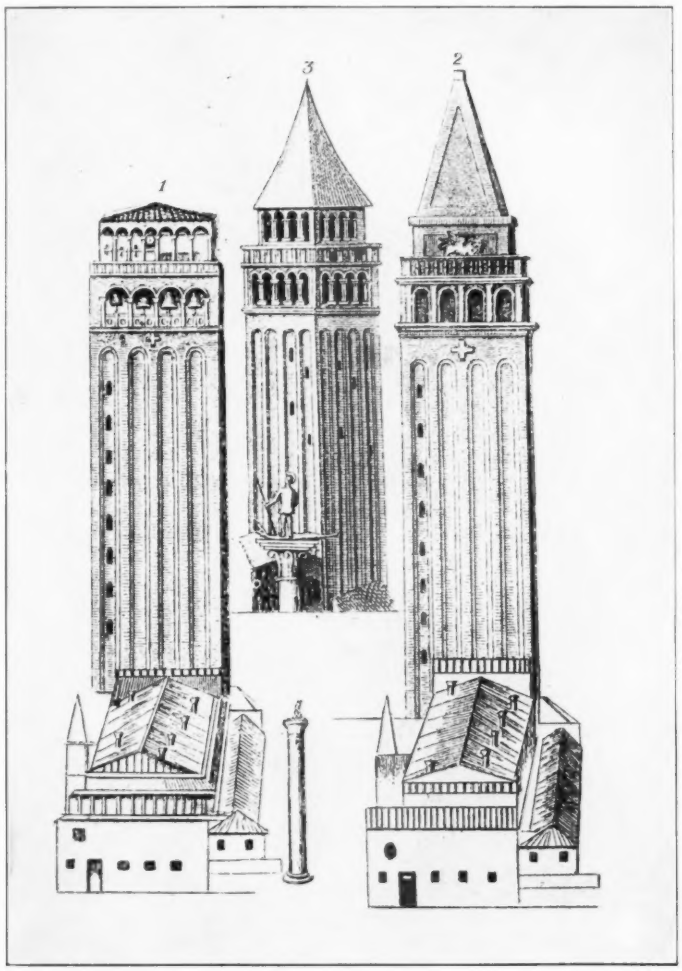
Coming now to the shaft of the tower: This was a massive quadrangular, rectangular, equilateral structure of brick. The brickwork at each angle was thickened so as to form a pilaster-buttress, and on each face were three ribs or pilasters connected at the summit with each other and with the angle pilasters by ornamented arches, immediately over which came the cornice of the shaft upon which the flooring of the bell-chamber eventually rested. These lateral pilasters or ribs are common to the Campanili of Venice, but I remember no instance of more than one pilaster on each face. Inside this outer or main tower was built another tower, and the space between the two was used to carry up, not by steps, but by an inclined plane, a passage from the ground to the bell-chamber. Sansovino, speaking of the shaft, and following the *Cronaca Scivos* says that it was "stabile e soda." Whether he meant by that phrase to affirm that the walls were solid and not built "a sacco," that is rubble walls, as was the case with Chichester tower and with many early buildings in Venice, it is not easy to say; but the fall of the tower has revealed beyond doubt the fact that the walls of the outer tower were built solid. No argument in favour of the rubble-wall theory can be drawn from the vast cloud of dust which, immediately after the fall, covered the piazza to the depth of about 4 in., for mortar of the firmest hold would pulverize in the process of the collapse, and it is certain that the stump of the shaft, which has now been laid bare, requires strong pick strokes to disintegrate it.



BASE AND FOUNDATION OF CAMPANILE.
(As sketched by Comr. Boni in 1885.)

So far as has been observed as yet, the condition of the shaft was not entirely unsatisfactory. The mortar employed came from Padua, and was in far better condition than the mortar of the foundations. The bricks, to a considerable extent, were magnificent Roman brick of an admirable texture and grain, requiring a saw to divide them, and resembling marble in their compactness. These Roman bricks are of various

tones of red and yellow; many of them bear inscriptions which have been carefully catalogued. Some show the imprint of the paws of animals who trod upon them when they lay still fresh and unbaked by the brick-kilns of Aquileia or Tarvisium, others have the hand-grip dug into them before they were fired. Some are semi-circular, others wedge-shaped, made for the building of arches, others, again, round for the structure of columns. All are large and of excellent quality. They came from the abandoned remains of ancient Roman cities on the mainland—Altinum, Concordia, Opitergium, Aquileia. When the lower portion of the broken shaft—the portion which is still standing—comes to be demolished, it is probable that Roman remains will be more frequently laid bare. It has not, so far, been determined, whence came the contemporary brick employed to build the shaft. Much of it looks like Trevisaned, and though inferior to the Roman brick in size and in consistency, it presents, where it has come down in unbroken blocks, a fine quality and colour. The collapse of the Campanile has enabled us so far to learn this much about the structure and material of its shaft, but more may confidently be expected when the ruins have been thoroughly examined by that competent authority Com. Giacomo Boni.



THE CAMPANILE.
(1. As given by Jacopo de Barbari, 1500. 2. As finished by Mastro Buono, 1513.
3. As given in Breydenbach's "Peregrinatio," 1486.)

The shaft was completed in the reign of Domenico Moresini; the bell-chamber seems to have been added about 1170; it is described as being stumpy and low. It very likely had a squat pyramid on the top, which probably was gilded. This may have been the bell-chamber and pyramid represented in Breydenbach's "Peregrinatio" of 1486—if, indeed, any reliance is to be placed on these early wood-cut illustrations. In the famous design of Venice, dated 1500, and now attributed to Jacopo de' Barbari, the bell-chamber appears without a pyramid. This may be accounted for

by the fact that in 1489 the tower was struck by lightning, and the summit burned "e una saetta uno ictu bruciò la cima del Campaniel de San Marco, che era dorata." The government then confided the restorations to the master-builder Bartolomeo Buono of Bergamo, who began the work about 1510 and constructed the bell-chamber, attic, pyramid, and angel, as they practically remained till the fall of the tower. The work seems to have been completed by 1513, for Sanudo, in his Diary, makes the following entry: "1513, 6th July. To-day in the Piazza of St. Mark the gilded copper angel was hoisted up to the sound of trumpets and pipes. Wine and milk were poured upon it in token of rejoicing. Pray God it has been raised in a happy hour and to the increase of this Republic." Buono's bell-chamber was an elegant structure of Istrian stone with angle pilasters and columns of *Verd-antique* and other precious marbles on each side, corresponding to the three pilaster ribs of the shaft, and connected, like them, by arches which bore the cornice, upon which rested the heavy attic whence sprang the final pyramid. In the spandrils between the arches were massive lions' heads, boldly and impressively hewn in Istrian stone.

The bell-chamber contained four large bells thus described by the Procurators of St. Mark, the official custodians of the Campanile: "In the said Campanile are four bells, all of an excellent sound; the smallest is called the *Trottiera*, the next is known as the *Mezza Terza*, the third as the *Nona*, and the fourth and largest is called the *Marangona*." Sansovino adds a fifth, a small bell, by name the *Ringhiera*. The *Marangona* was the great bell of the city, marking the main moments of the day; it rang at sunrise, at *Ave Maria* for the cessation of work, and at midnight. The *Trottiera* summoned the senate to its sittings; the *Ringhiera* tolled for those about to die by the hand of Justice. The *Mezza Terza* and the *Nona* announced other important hours; the *Nona*, for example, rang midday. All these bells were rung either by hammer in the bell-chamber or by rope from the base of Campanile. The holes through which the bell-ropes passed were coated with thick bottle-glass to diminish the wear and tear. In the fall of the tower the *Marangona* was but little injured; the rest were broken.

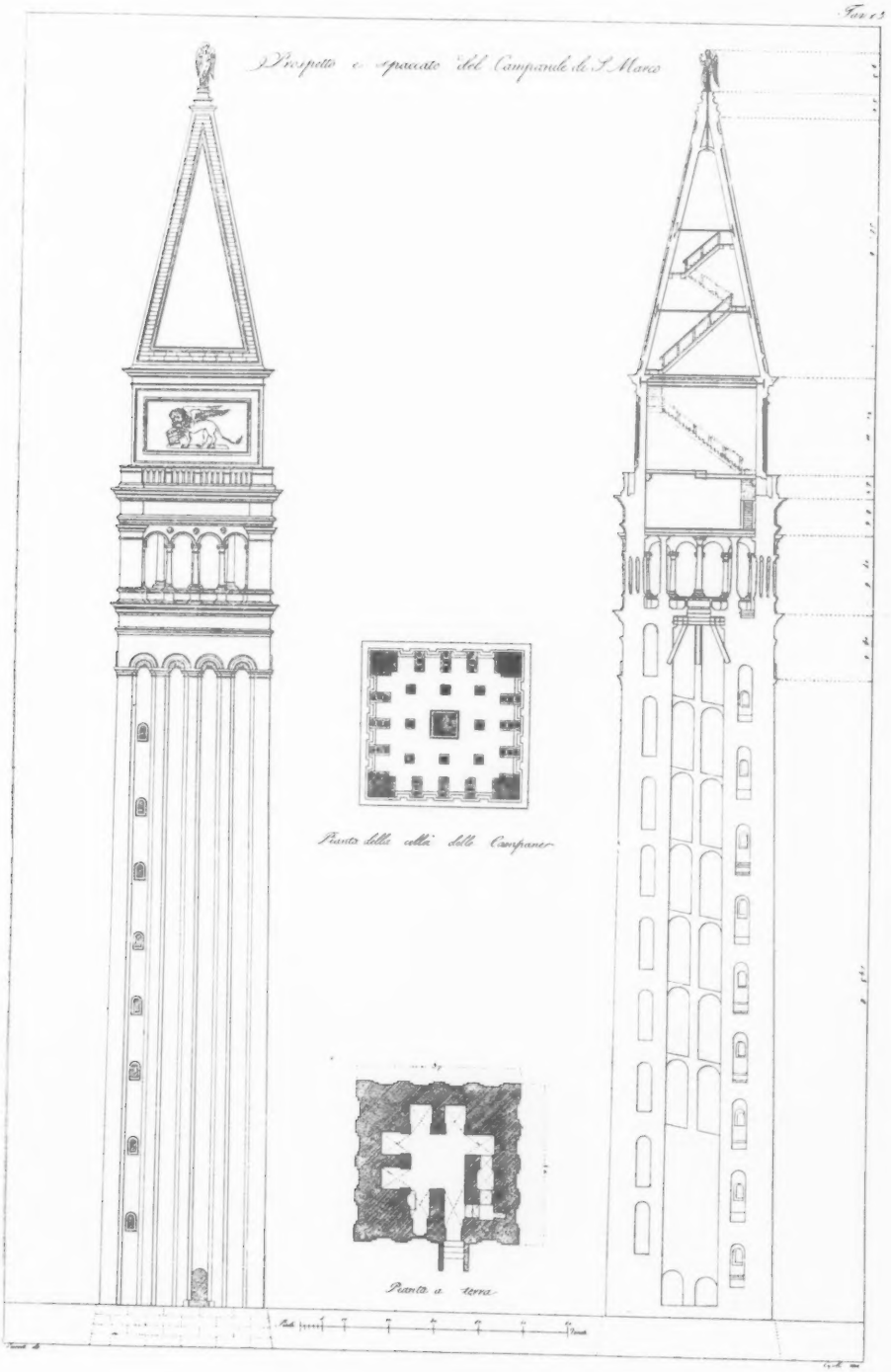
Above the bell-chamber came a balustrade, and inside that the attic. It was built of brick, and bore upon its Western and Eastern faces a massive decorative figure in Istrian stone. Both represent Justice—the figure to the West reposed its feet on a Cherub's head, flanked by two other human heads; the figure to the East rested on a Dragon. Both were designed, like the lions of the spandrils, by Mastro Buono.

The pyramid was also of brickwork externally lined with plates of bronze which had acquired an exquisite green *patina*. Inside the pyramid was a shallow cupola, through the crown of which passed the pivot on which the angel at the apex of the pyramid revolved. To crown all came the great angel of gilded lead—it had been renewed several times, and in various metals—with wings expanded to catch the impact of every wind that blew.

Such was the tower which the Venetians built for themselves. It consisted of eight parts: (1) the piles, (2) the platform, (3) the foundations, (4) the base, (5) the shaft, (6) the bell-chamber, (7) the attic, (8) the pyramid; divisions which are to be found in almost all the Venetian Campanili, whether the attic be round as in San Giorgio Maggiore, or octagonal as in San Stefano, or square as in San Francesco della Vigna, and whether the attic be surmounted by cone, pyramid, or cupola. The attic and cone, pyramid or cupola, however, are sometimes wanting altogether, sometimes are merely rudimentary.

In a peculiar fashion the Campanile of San Marco summed up the whole life of the city—civil, religious, commercial, and military—and became the central point of Venetian sentiment. For the tower served the double needs of the ecclesiastical and the civic sides of the Republic. "His diebus," says Andrea Dandolo, "excelsa turris condita est usibus ecclesiæ et Reipublicæ deputata." Its bells marked the canonical hours; rang the workman to his work, the merchant to his desk, the statesman to the Senate; they pealed for victory or tolled for the demise of a Doge. The tower, moreover, during the long course of its construction, roughly speaking, from the middle of the tenth to the opening of the sixteenth centuries, was contemporary with all that was greatest in Venetian history; for the close of the tenth century saw the conquest of Dalmatia, and the foundations of Venetian supremacy in the Adriatic—that water-avenue to the Levant and the Orient—while by the opening of the sixteenth the Cape route had been discovered, the League of Cambray was in sight, and the end at hand. The tower, too, was a landmark to those at sea, and when the mariner had the Campanile of San Nicolò on the Lido covering the Campanile of St. Mark, he knew he had the route home and could make the Lido port. The tower was the centre of popular festivals, such as that of the *Svolo* on *Giovedigrasso*, when an acrobat descended by a rope from the summit of the Campanile to the feet of the Doge, who was a spectator from a window in the Ducal

THE CAMPANILE OF SAN MARCO AS IT APPEARED FROM THE PIAZZA.


Tav. 15
Prospetto e spaccato del Campanile di S. Marco
Pianta della cella delle Campane
Pianta a terra

Palace. Vasari might say that "this tower, in truth, has nothing excellent about it in itself, neither in form nor adornment, nor in anything else that is laudable"; but visitors from the north, like Fynes Moryson and Coryat, wax eloquent over the Campanile and the view from it—the "fairest and the goodliest prospect that is (I think) in all the worlde, for therehence may you see the whole modell and forme of the citie *sub uno intuitu*, a sight that doth in my opinion farre surpasse all shewes under the cope of heaven"; while for the Venetians the tower was officially, "famosum et nominatum per totum orbem," as the Great Council declared in 1405, and for the people a personification of enduring strength, "Gnanca se cascasse el Campaniel," "Not though the Campanile should come down," was their strongest form of negation.

The Campanile was under the care of the *Procuratori di San Marco*, and they insisted on preserving the prestige of their charge by preventing the erection of any tower in the city which should surpass it in height. Whether they were as careful of its structure is doubtful, and the tower had many enemies during the course of its life. From the first there seem to have been houses attached to its base. We have seen that the hospital founded by the sainted Orseolo Doge was possibly connected with the shaft. We know that Giorgio Valla, the scholar, kept a school at its foot, that the *panataria* or bakery stood on its south side, and that the disfiguring shops and offices were only cleared away in October 1878. Neither the erection nor the removal of these buildings, with all the tapping at the tower thereby implied, can have been of advantage to the structure, and, indeed, it was the meddling with the remaining building on the fourth side, the Loggetta, which precipitated the disaster of July 14th. But the Campanile suffered most from fire, lightning, and earthquake. The long series of accidents is recorded in Gallicciolli's "Memorie Venete" and elsewhere. Here it will suffice to mention the most important. In 1383 lightning set fire to the wooden pyramid on the tower, which was promptly grappled with chains and ropes and hauled, still flaming, down into the Piazza. In 1405 the illuminations for the capture of Padua again fired and burned the summit. In 1426 all the shops round the base of the tower were burned, and in 1489 the top was once more destroyed by fire, and, as we have seen, restored in its final form by Mastro Buono. In 1574 another fire raged at the foot of the Campanile. Finally, in 1745, a terrible flash of lightning struck the tower at a spot above the Loggetta, precisely where the final and fatal crack of July 14th began to show itself. That spot had been struck before, in 1735, and was struck again in 1761. The *Procuratori* then charged the engineer Toaldo to apply a lightning-conductor, and that was done in 1776.

The most serious of the many earthquakes which shook the tower was that of 1511. The top of the Campanile, especially at a point where it had already been struck by lightning, showed serious cracks. The great bells rang of themselves, and the use of them was suspended until they had been fortified by beams. After this shock the foundations were examined and found to be in excellent order, and declared capable of bearing a much greater weight. It will be remembered that this earthquake took place just at the time when Mastro Buono was contemplating the new bell-chamber, attic, and pyramid. In order to carry out this work, a portion of the tower at the north-east angle, looking towards the *Merceria*, was taken down and rebuilt. It was precisely at this angle that the final mischief declared itself, though much lower down, and it is not unlikely that the fatal weakness of the tower may date from the earthquake of 1511 and the restorations entailed thereby.

Other earthquakes followed, but none so damaging to the Campanile. Yet, in spite of lightning, fire, earthquake, and the lapse of time, the great tower of Saint Mark showed only the faintest deviation from the perpendicular, and, at the time of its fall, it seemed to almost every expert, and certainly to all the profane, the soundest building in Venice. One man, however, Signor Luigi Vendrasco, not an engineer, but a master builder, with a wide experience of the whole group of buildings round the Piazza, raised a warning voice about seven years ago, insisting that the Campanile was in a dangerous condition, and predicting its collapse. The warning was neglected. And now we come to the dolorous moment of the fall.

It would require expert knowledge to determine the cause or causes which brought about the subsidence of this great tower, though bad mortar slowly disintegrated probably played a leading part. A report by competent authorities will, no doubt, be presented when the rubbish has been cleared away, the remaining walls examined, and the foundations laid bare. All that can be done here is to record the events which immediately preceded the catastrophe.

Infiltration of water had been observed in the roof of Sansovino's Loggetta where that roof joined the shaft of the Campanile. At this point a thin ledge of stone, let into the wall of the Campanile, projected over the junction between the leaden roof of the Loggetta and the shaft of the tower. In order to remedy the mischief of infiltration it was resolved to remove and

replace this projecting ledge. To do this a cut was made into the wall of the Campanile, which, at this point, consisted of a comparatively modern surface of masonry, placed there to repair the damage caused by the lightning strokes above recorded. This cut was made, not piecemeal, but continuously. The work was carried out on Monday, July 7th. In the process of cutting through the brick, the architect in charge became alarmed at the condition of the inner part of the wall laid bare by the cut. He expressed his fears to his superiors, but apparently no examination of the tower was made till the Thursday following. Even then the imminence of the danger does not seem to have been grasped. On Saturday, the 12th, a crack was observed spreading upwards in a sloping direction from the cut above the roof of the Loggetta, towards the north-east angle of the shaft, then crossing the angle and running up almost perpendicularly in the line of the little windows that gave light to the internal passage from the base to the bell-chamber. This crack assumed such a threatening aspect, and was making such visible progress, that the authorities in charge of the tower felt bound to inform the Prefect, though the danger was represented as not imminent, and the worst they expected was the fall of the angle where the crack had appeared. A complete collapse of the whole tower was absolutely excluded. As a precautionary measure the music in the Piazza was suspended on Saturday evening. On Sunday orders were issued to endeavour to bind the threatened angle. But by Monday morning early it was evident that the catastrophe could not be averted. Dust began to pour out of the widening crack, and bricks to fall. A block of Istrian stone crashed down from the bell-chamber, then a column from the same site. At 9.47 the ominous fissure opened, the face of the Campanile towards the church and the Ducal Palace bulged out, the angel on the top and the pyramid below it swayed once or twice, and threatened to crush either the Sansovino's Library or the Basilica of San Marco in their fall, then the whole colossus subsided gently, almost noiselessly, upon itself, as it were in a curtsey, the ruined brick and mortar spread out in a pyramidal heap, a dense column of white powder rose from the Piazza, and the Campanile of San Marco was no more.

It is certainly remarkable, and by the *popolo* of Venice it is reckoned as a miracle, that the tower in its fall did so little harm. Not a single life was lost, though the crowd in the Piazza was unaware of its danger till about ten minutes before the catastrophe. The great Angel shot down and stopped just before the main portal of St. Mark's; the thick porphyry column of the *Pietra del bando* saved, as by a miracle, the exquisite south-west, or Sta. Sofia, angle of the Church; the copper plates from the pyramid formed themselves into a miraculous fence for the first of the great bronze standard sockets. Only a deep cut into Sansovino's splendidly-built library, and a few chips on the outer steps of St. Mark's façade hint at the ruin which might have been wrought, and the *popolo* commenting on these facts, and personifying the tower they loved so well, say, "Lu xè sempre stà galantomo, lu ga parlà; lu ga avisà, 'fè largo che casco'"—"He's always been a gentleman; he spoke, he warned us: 'Away with you, for I'm coming down!'"

The Campanile of St. Mark's is not the first, nor, I fear, will it be the last of the Venetian towers to fall. In 1347 the Campanile of Chioggia collapsed as an inscription over the door leading into the tower records. In 1410 a violent gust of wind "un refolo grandissimo," brought down the towers of Santa Fosca and the Corpus Domini. In 1455 the Campanile of S. Angelo which was off plumb, was straightened by a Bolognese engineer, but fell the next day, carrying with it a part of the Church and the Convent of San Stefano. In 1596 the Campanile of San Leonardo fell; Tassini's "Curiosità Veneziane" records the fall of the great tower of San Giorgio Maggiore; the latest was the Campanile of Sta Ternità, which came down as recently as the 13th December, 1880.

Public opinion seems to be preponderantly in favour of rebuilding the Campanile where it stood and as it stood. A minority urge that the tower in itself was not a beautiful object; that, apart from its historical associations, it was uninteresting; that the Piazza and Piazzetta acquire amplitude, the façade and cupolas of the church dignity, by its absence; that the beautiful Porta della Carta can now be seen from the western end of the Piazza; but the majority is convinced that neither the Piazza, nor Venice, nor the Lagoon can do without that severe and dominating pile. The massive simplicity of the Campanile was both foil and counterpoise to the bizarre brilliancy of St. Mark's and the Ducal Palace; while, as seen from the lagoon, the long row of horizontal lines, the tops of the *Procuratie* and the Ducal Palace, call for the bell tower to break their monotony. In any case, whichever view be taken, the reconstruction is, I believe, assured.

It is, perhaps, too early to arrive at a just estimate of the cost. Much will depend on the condition of the foundations, and the extent to which it will be necessary to renew or to fortify

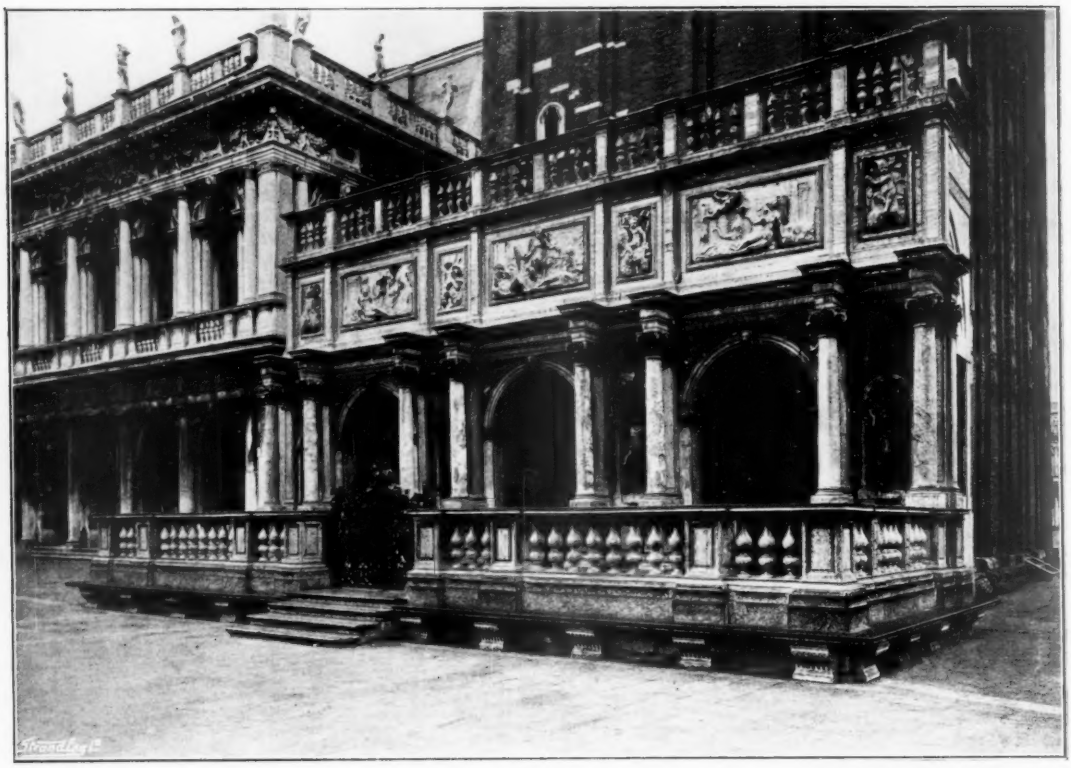


Photo: J. C. Ashton & E. Dockree.

THE LOGGETTA.

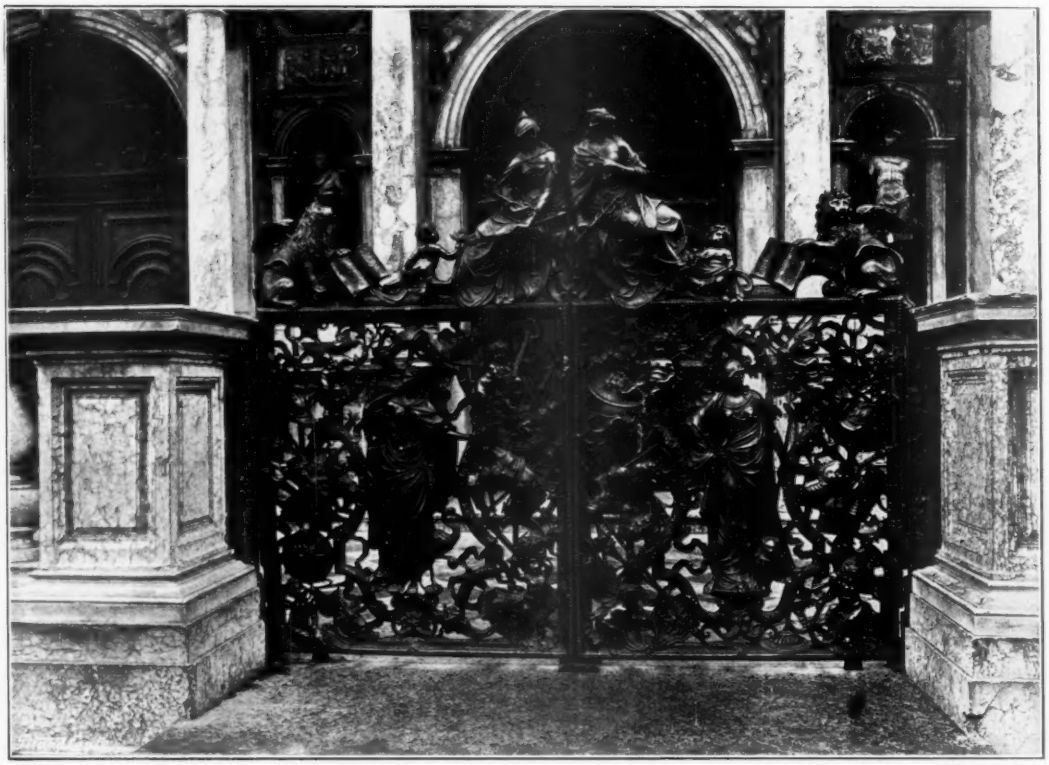


Photo: J. C. Ashton & E. Dockree.

THE LOGGETTA.
THE BRONZE GATES BY ANTONIO GAI.

Photo: J. C. Ashton & E. Dockree.

THE LOGGETTA.
STATUE OF PALLAS.

them by extending their area. The best opinion would, at present, be opposed to carrying up the new tower upon the old narrow foundations, which were probably not intended for a structure of such a weight. Guesses at the probable cost have been hazarded, varying from 1,000,000 to 6,000,000 lire; possibly somewhere about 2,500,000 will be found to suffice. Subscriptions have been opened and fairly well filled. In any case we may be pretty sure that the funds will be forthcoming, for the sentiment of Venice, the sympathy of Italy, the æsthetic sense of the whole world, demand the restoration of the Campanile of San Marco.

That restoration will not present difficulties of other than a financial and structural nature, for the great tower was a simple monument, impressive by its bulk and venerable from its associations; but in its fall it swept away another building of a very different character—the Loggetta of Sansovino. This small but exquisite structure depended for its effect neither upon its size nor upon its associations, but upon the delicacy and richness of its workmanship and ornamentation. Like the little gothic church of S. Maria della Spina at Pisa, it seemed a carefully-wrought jewel in a setting of larger and more imposing buildings.

The Loggetta was designed and executed about the year 1540, by Jacopo Sansovino, who had recently finished his masterpiece, the *Libreria Vecchia*. It was intended to take the place of an older building which had been destroyed in 1489 by the famous flash of lightning that struck and brought down a large part of the bell-chamber on the Campanile. The more ancient Loggetta served as a kind of club or *rendezvous* for the Patricians of Venice, but on the completion of the new edifice it was set apart for the *Procuratore di San Marco* on duty and his guard, who kept watch during the sittings of the *Maggior Consiglio*. After the fall of the Republic, and down to the present day, the Loggetta was used for the drawing of the governmental lottery every Saturday at three o'clock.

The Loggetta, as designed by Sansovino, consisted of a terrace or open vestibule, reached by four steps from the level of the Piazza, and enclosed by a balustrade. The fine bronze gates, with their rich and florid modelling, were added much later, in 1750, by the artist Antonio Gai. From the terrace sprang the façade of the building. Eight columns of oriental breccia, in groups of two, flanked and divided the three arches of the front, and carried a somewhat heavy attic. In the four intercolumnar spaces were four niches with four bronze statues, the work of Sansovino, representing Pallas, Apollo, Mercury, and Peace, to which the sculptor's son, Francesco Sansovino, gives a fanciful interpretation laudatory of the Republic. These figures, though damaged, are not destroyed, and may take their place again if the Loggetta is

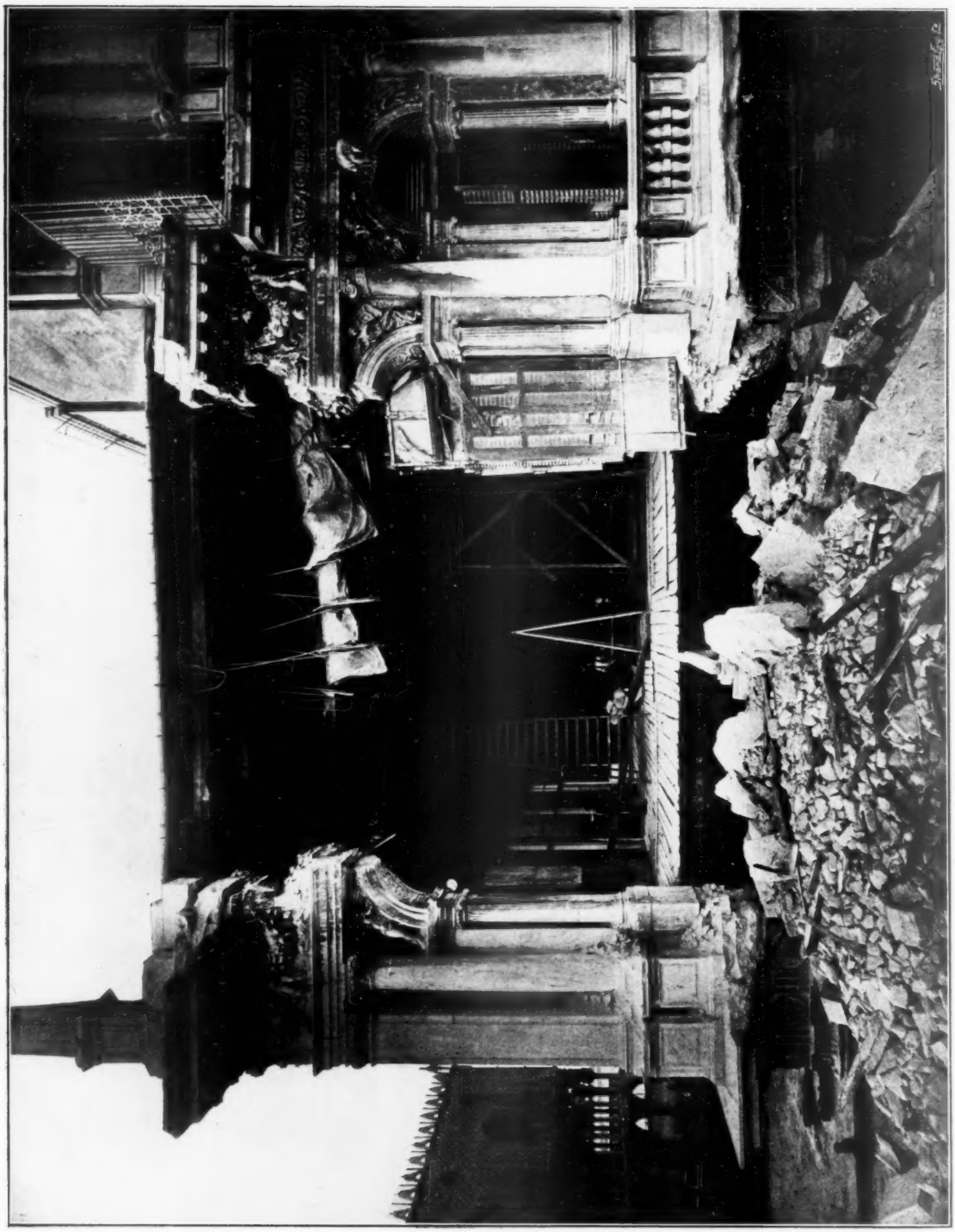


Photo: Contavini and Giacomelli.

LIBRERIA VECCHIA. SHOWING THE DAMAGE DONE BY THE FALL OF THE CAMPANILE.

reconstructed. The three main divisions of the attic, corresponding to the three arches below, contained bas-reliefs. In the centre Venice, figured as Justice, sat throned upon her lions, while the rivers of the mainland poured riches at her feet. On the right was Venus, the symbol of Cyprus; on the left was Jove representing his birthplace Crete, the two great maritime possessions of the Republic. The rest of the façade was richly adorned with bas-reliefs and columns and balustrades, and the whole structure, with its breccia pillars, its deep green bronze and Verona marbles of red and white, formed a glowing and sumptuous base to the austere shaft of the Campanile that towered above it.

Inside the Loggetta was the guard-chamber, with vaulted and coffered ceiling, and a beautiful group, in terra cotta, of the Madonna and Child with St. John, by Sansovino, now completely destroyed. It is much to be regretted that, when the danger to the Campanile was first observed, no steps were taken to place in security at least this terra cotta group, the bronze statues, and the gates.

Other work of Sansovino besides the Loggetta has suffered by the collapse of the Campanile. The lateral bays of his noble Library have been cut clean through; yet the angle pilasters with the superimposed obelisk stand there, almost isolated but not fallen, a splendid testimony to the sound workmanship of the great renaissance architect.

The Campanile will be restored, and future generations will, perhaps, hardly distinguish between the old and the new; but in the case of the Loggetta, though much of the original work has escaped entire destruction, it is doubtful whether a restoration can ever recapture the touch of the master hand.

HORATIO F. BROWN.

Architecture at the Royal Academy.

A DISCUSSION.—II.

THERE seems to be a general consensus of opinion that the Architectural Room at the Royal Academy is unsatisfactory and needs reformation.

By way of a beginning we are counselled to eschew the gay perspective and seek salvation in the severe geometrical drawing.

Mr. Blomfield would abolish the exhibition altogether; while Mr. Ricardo would not only keep it, but proposes a winter exhibition as well. To this last idea Mr. Shaw makes the very valid objection that there is barely enough suitable material to go round even now; a second exhibition would seem therefore to be impossible.

Mr. Ricardo alone suggests complete freedom for the architect to exhibit his building in any way that seems best to himself; he would remove all restrictions, and allow models, drawings of all kinds (with a bias in favour of diagrams), and *photographs*. It is a little startling to think of photographs at the Academy; but revolutionary as it seems, I believe that photographs with explanatory plans and sections would be the best and truest way in which to represent the vast majority of buildings.

Photography has many advantages over any other method. A building can only be represented by a photograph *after it has been built*, and this is important, as a guarantee that the architect's work is a real piece of building, and not what Mr. Blomfield calls "Studio Architecture." It would emphasize the fact that architecture is not a draughtsman's art, and it would also save the time which is generally most unprofitably and grudgingly spent in making "Exhibition" drawings. It is used almost exclusively to illustrate articles and lectures on architecture and kindred subjects. The ARCHITECTURAL REVIEW fills its pages with reproductions from photographs of old and current architecture. (The water tower illustrated in the October number is an excellent example of the sort of thing I am advocating; a photograph to show the finished building, sections and plans to explain how it was put together.)

Geometrical drawings can be as much "cooked" and falsified as perspective sketches. Deftly drawn and coloured, they may be made as misleading. The French drawings Mr. Shaw quotes were certainly most beautiful; but is it not rating human nature too high to expect that an architect who has been engaged for many months in watching and shaping a building will cheerfully devote two more to making elaborate geometrical drawings of it to send to an exhibition?

A modified benediction may be given to the "perspective" in spite of all that has been said against it. There have been "picture drawings" at the Academy which, if they did not absolutely

represent the building, were inspiring and suggestive—even Mr. Belcher's "Cloud piercing tower," and exalted capitals play their part. If the design is really fine, it stimulates the imagination. The fault lies in giving it a local habitation, instead of letting it stand on its merits as an exercise in design.

To abolish the exhibition is running away from the difficulty. An exhibition gives opportunities of comparison and possibly of rearranging our own standards. I doubt if we take enough count of modern building. Our admiration for old work should not blind us to the fact that old buildings represent old problems and conditions solved and finished; new buildings the struggle with new conditions and new problems; the proper solution of which it is our business to achieve.

I would therefore strongly advocate a relaxation of the present conditions, and allow an architect to represent his work in any reasonable way, and I believe the exhibition would gain greatly in interest; the flaming advertisements would be crowded out, and "hanging" would be a greater honour than it is now popularly supposed to be.

ERNEST NEWTON.

The London County Hall Scheme.

SEVERAL projects for a County Hall have been before the Council of late years, and have been abandoned. The present scheme seems more likely to be carried through than any of its predecessors. In selecting a site three main considerations have to be taken into account.

1st. Position from official standpoint.

2nd. Price.

3rd. Artistic and historical value.

The first is really one that the members of the London County Council are the best judges of.

It must be in a central position easy of access, yet quiet, and close to governing bodies like the Asylums Board, School Board, and the Houses of Parliament. Now that municipalities are acquiring waterworks, tramways, gas, etc., it is of great importance to be in close proximity to Westminster, when bills have to be prepared and pushed through. But too much stress is surely laid on this point if you compare the position of other corporations and London in this respect. The question of price is one for the ratepayers to decide; but it often happens that the cheapest site on paper proves to be the worst bargain in the long run. The unfortunate predominance of the opinion of the valuer in all architectural matters is fatal to achieving any grand result. The third point is the one that concerns us at the present moment. Is this proposed site a good one, viewed from the artistic and historical side? The Adelphi Terrace, as seen from Waterloo Bridge or Charing Cross Bridge or the Embankment or River, is a fine building, and certainly stands out conspicuously by the side of its recent neighbours. Can any dispassionate person say that the destruction of this terrace, in favour of any one of the buildings mentioned by the Committee, would be a gain? Would another Hôtel Cecil or Savoy be an improvement? If the London County Council had the power to spend money on their home at all on the scale that foreign municipalities have, it is conceivable that a really fine and monumental edifice might be erected; but, as stated above, the valuer will waltz in and cut the available sum to be expended down to a paltry figure. There is no chance of a Hôtel de Ville like that of Brussels or Paris. The London County Council has not secured the love of the Londoner to such an extent that the members dare launch out on any vast plan of magnificence for their County Hall. Such being the case, the wisest course for them to pursue would be to give up all idea of making a show, and build a plain house entirely free from ornamentations outside, but conveniently planned, with fine committee-rooms and a spacious Hall for their meetings, leaving it for future generations to add the embellishments. Such an edifice would not beautify the Embankment façade, but would not offend the artistic sense one quarter as much as the futile attempts at architecture on the same frontage. In addition to the artistic loss, if this terrace were pulled down, there is its historic value. Is London so rich in buildings of interest that it can afford to go on in its present ruthless fashion? How many buildings are annually offered up to the Moloch of "Improvement!" Will not after ages curse us for our greed in sweeping away the creations of great architects, often for no other reason than that their sites are demanded by the fiend of speculation? We may not all of us admire the work of the brothers Adam, but is it at all likely that the New London County Hall will be considered in a hundred years a good exchange for their work? London has a charm of

Photo: E. Dockree.

JOHN STREET, ADELPHI, FROM
DUKE STREET.

Photo : E. Dockree.

ADELPHI TERRACE.

its own, due not to its having grand avenues and boulevards, but to the fact that it has been the home of most of Britain's greatest men. They have lived in or written about places like the Adelphi. The north bank of the Thames, between Charing Cross and the Tower, is richer in historical associations than any other portion of British soil. Are we justified in razing the buildings that are still left to us, and thus severing the visible links with the past? If there were no other sites to be had, one would answer this last question in the affirmative; but the London County Council Committee have not proved this to be so. It is devoutly to be hoped that the scheme of the Committee to build only on the centre block and leave the surrounding houses to be absorbed as the need for them arises, will not be carried out. It is certain to lead to bridges connecting the departments. On the whole the scheme, though not absolutely bad, is not a satisfactory one. The approach is poor, and the building will be closed in on three sides. It will be invisible from the Strand and, according to the present plan, will have only one side visible towards the Embankment.

MERVYN MACARTNEY.

NOTE.—Since this article was written the London County Council has indefinitely postponed the scheme, the voting resulting in a tie. This, however, is probably only a temporary respite, and the scheme may be again revived.

The Statue of King Charles I.

(*See frontispiece.*)

THE venerable statue at the junction of Whitehall and Trafalgar Square has had a remarkable history. It is the work of Hubert Le Sueur, a French sculptor who migrated to England about 1628. It was probably made to the order of Sir Richard Weston (at that time Lord Treasurer, and afterwards Earl of Portland), and was cast in 1633, which date, together with the sculptor's name, is inscribed on the work itself. Originally intended, perhaps, to grace the Lord Treasurer's gardens at Roehampton, and afterwards destined, it is said, to adorn Covent Garden Market, it was for some unknown reason laid aside as soon as it was cast, and so remained until its original was brought to the scaffold. It was then sold by the Long Parliament as old metal, and was bought by a London brazier named Rivett, who, instead of breaking it up, concealed it carefully till the Restoration. As soon as it came to light, the then Earl of Portland, as son of Lord Treasurer Weston, at once laid claim to it, but the claim was apparently evaded, for the statue soon afterwards passed into the possession of the Crown; and under Court auspices it was set up for the first time in 1674, either on or near the present site (for it has possibly been erected more than once). An indication of the vicissitudes it has undergone is afforded by the way in which the King leans to the right. He also once possessed a sword, but the weapon, after falling down in 1810 and being put up again, was finally stolen in 1844, when Queen Victoria went to open the Royal Exchange.

The statue has great merit, both of technique and of design. From the nature of its surface it would seem to have been cast by the *cire perdue* process, and then chased. In spite of some defects of anatomy the prancing horse, which some assign to the Spanish, and others (with more reason) to the Flemish breed, is nobly conceived, and the armed figure of the king, whose smallness in proportion to his mount was doubtless true to the life, is posed with dignity. One critic sees in the work traces of Italian influence, which is in accordance with a somewhat doubtful theory that Le Sueur was trained at Florence. At least it may be said that the group is among the nearest approximations England can show to the great equestrian statues of the Renaissance in Italy.

The very beautiful pedestal was carved (as documentary evidence proves) by Joshua Marshall, Master Mason to the Crown; but the design is variously attributed to Grinling Gibbons and Wren, who, as Surveyor-General of the Royal Works, superintended the erection of the statue. Some plugged dowel-holes at the sides show that the pedestal has been robbed of inscriptions or other accessories. The sculptured ornament at the two ends affords a conspicuous example of the use a great artist can make of heraldic decoration.

CECIL HALLETT.

The Cathedral of Siena.

FROM very early days some edifice devoted to the purpose of religious worship had occupied the site upon which now stands the cathedral of Siena. There is an early tradition that before the introduction of Christianity, a temple dedicated to Minerva had stood here. According to Pecci, it was in the eighth or ninth century that the first central place of worship of the Christian community was erected in this position, to take the place of an earlier cathedral which stood in Castelvecchio. It is said, too, that in the twelfth century a Sienese pope, Alexander III., dedicated the second Christian cathedral built on this little plateau. The existing church dates from the second quarter of the thirteenth century. At that time, owing to the development of a foreign trade, the citizens were growing in wealth, and were beginning to be stimulated by the new ideas and aspirations that inevitably take hold upon the minds and imaginations of a people engaging in extensive, adventurous, commercial enterprise. The ambitious young Commune wished to have a national temple that would be a symbol of the wealth and power of the State as well as a concrete expression of a people's gratitude to its Divine Protectress. The Sienese were anxious that their Duomo should equal in magnificence the cathedrals of rival cities. The new church was to be dedicated to the Virgin, and was especially to commemorate her Assumption. The Feast of the Assumption has ever been the greatest of Sienese festivals.

It is not known when the building of the new Cathedral was begun. Malavolti says that it was in the year 1245. Such documentary evidence as we possess gives some scanty support to the historian's statement; for the first existing account that we have of money spent upon the new Duomo is of the year 1246.*

And as we have no certain knowledge of the date when the new edifice was begun, so we do not know who was its first architect. We have no record of the name of any *operaio* who held office before the year 1257; by which time the original Cathedral was well advanced towards completion. The first Master of the Works whose name has come down to us was a certain Fra Vernaccio,† a monk from the then recently founded Cistercian abbey of San Galgano in the valley of the Merse. But there are no grounds for the supposition that his predecessors belonged to that religious house. In fact all the evidence that we have points the other way. After holding the position for only two years, Fra Vernaccio was succeeded by Fra Melano, another Cistercian from the same convent, who occupied the post of *operaio* for well-nigh two decades. Of the Cathedral in its original form, the nave and aisles, the purely structural part of the dome, and a portion of each of the transepts, were completed before Fra Melano took office. He was commissioned to add a bay to each of the transepts and to make other less important alterations in the church. He was also called upon to remedy the defects of his predecessors, who, in making the dome of the Cathedral, had shown a thoroughly Italian lack of constructive skill, for in the unsymmetrical, ill-placed lantern large fissures had already begun to appear.* Uncurbed by the Doric restraint required of Cistercian architects in the erection of the churches of their own Order, at first Fra Vernaccio, and afterwards his successor, began to arrange for the proper furnishing of the new Duomo. The one provided it with choir stalls; the other, in 1266, summoned Niccola Pisano to Siena to make for it a glorious pulpit. In the following year the Cathedral was completed, except as regards its façade. The nave of this church was shorter by two bays than the existing Duomo. The present choir, also, with the baptistery of San Giovanni which supports it, was not yet built.

There is no documentary evidence as to who was the architect of the Cathedral or as to his *provenance*. Mrs. Richter tells us‡ that it is the oldest Gothic building in Italy; and, like Mr. Hastings, accepting without question the conclusions of patriotic French writers, she exaggerates very much the influence of the Cistercians upon its first designer.‡ Not only is the Cathedral of Siena by no means the first Gothic building in Italy: it is only in a very limited sense a Gothic building at all. There were three great schools of architecture in central Italy at the beginning of the thirteenth century; and in the Duomo of Siena there are to be found, as we shall see, evidences of the influence of all of them.

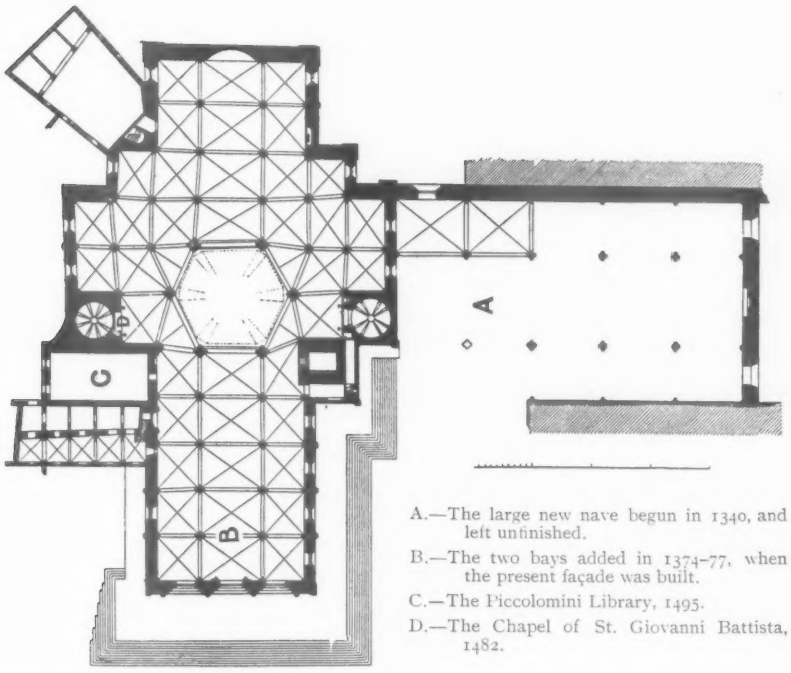
* Borghesi and Banchi, *Nuovi Documenti per la Storia dell' Arte Sienese*, Siena, Torrini, 1898, p. 5.

† Canestrelli, *L'Abbazia di S. Galgano*, Florence, Alinari, 1896, pp. 20 and 128.

* Milanesi, *Documenti*, etc., vol i., pp. 144 and 145.

† See THE ARCHITECTURAL REVIEW, September, 1901, p. 100.

‡ Richter, *Siena*, Leipzig, Seeman, 1901, p. 34.



A.—The large new nave begun in 1340, and left unfinished.

B.—The two bays added in 1374–77, when the present façade was built.

C.—The Piccolomini Library, 1495.

D.—The Chapel of St. Giovanni Battista, 1482.

THE CATHEDRAL OF SIENA. PLAN.

There was, first of all, the Lombard Romanesque. This style contained, as Reynaud, Canestrelli * and Nardini Despotti † have demonstrated, the elements of Gothic. In Lombard churches like that of Aurona we find the square piers carrying engaged shafts on their faces, which prepared the way for the Gothic method of vaulting. We find rib-vaulting at S. Ambrogio at Milan. In such churches as S. Antonio at Piacenza we meet with oblong bays covered with pointed arches.

But though the Lombard architects pointed out the road which the French afterwards took, they were unable to pursue it themselves. The preparatory stages in the evolution of Gothic architecture led to nothing on Italian soil. Inferior to the Pisans as well as to the southern architects as decorators, the Lombards shared with other mediæval Italians their lack of skill as constructive designers. "The history of Lombard . . . building in Italy," says Cummings, "is a history of crumbling walls and falling vaults, and hundreds of the more important structures of that period are deformed by awkward buttresses of later date, and hundreds more are kept from falling into instant ruin only by the iron rods which tie them together in all directions."‡ It was in France that the Gothic style received its full and logical development; and the true Gothic came into Italy as a foreign importation. Moreover, the Italians never properly apprehended the lessons taught them by their Gallic teachers. They showed themselves incapable of grasping the more advanced principles of Gothic construction.

A greater, but by no means as widely influential a school of architecture, was the Tuscan Romanesque, or Pisan school. The Pisan architects were superior to their Lombard contemporaries both as constructors and as decorators. Theirs was the greatest school of architecture that Italy has produced in modern times. Owing something to Byzantine influences and something to Lombard, many of its most characteristic features both of structure and ornament were due to direct classical inspiration, derived from the study of the early Christian basilicas. It had, however, some qualities of grace and charm that were all its own.

In the most typical churches of this school we see abundance of beautiful material judiciously employed. Made all glorious within by mosaic and fresco and marble inlay, their builders did not seek to produce an effect by surface ornament alone. In no other Italian churches do we find so much structural decoration. Both in the interior and the exterior they made a lavish use of beautiful arcades, of a multiplicity of graceful columns large and small. It was the Pisan architects, too, and not, as has been recently

* Canestrelli, *op. cit.*, pp. 85–87.

† Nardini-Despotti, *Del Duomo di Milano e della sua Facciata*, Milan, Saldini, 1889, p. 103.

‡ Cummings, *Architecture in Italy: A History of Italian Architecture from Constantine to the Renaissance*, Houghton, Mifflin & Co., New York, 1901, vol. i., p. 110.

asserted,* the Cistercians of San Galgano, who had first sought to create a decorative effect by placing blocks or slabs of marble of different colours in alternate layers. In the Cathedral of Pisa, begun in 1063, we see bands of black and white marble in the arcades of the clerestory. In the south façade of the Church of S. Giovanni Fuorcivitas at Pistoia, erected a century later, this mode of decoration is used with less restraint. In this, as in some other churches, built by masters of the Pisan school, the excesses of the architects of Siena Cathedral are foreshadowed.

The third and latest of the great schools of architecture existing in Tuscany in the early years of the thirteenth century was the Burgundian-Gothic. This style was introduced into Italy by the Cistercians, in the closing years of the twelfth century. The most important of the early examples of this style now remaining are the abbey churches of Chiaravalle di Castagnola, Fossanova, and Casamari. In adopting the grouped piers instead of the single shaft used by the architects of the Île de France, the Cistercian builders followed, it is true, Lombard precedent. But, nevertheless, in construction as in design they were thoroughly French in spirit. They showed a complete grasp of the fundamental principles of Gothic architecture. We see in their artistic achievement a more thorough application of "the principle of concentrated strains and balanced thrusts," than is to be found in the great majority of Italian buildings. Their works are inspired by French architectural daring, and by a feeling for beauty of architectural form which is also essentially Gallic.

At Casamari we find a skeleton framework of ribs and piers and buttresses in which Gothic methods of construction are fully illustrated. As in France, the insterstices of the skeleton framework of the building are filled up with light masonry and with large traceried windows. Both at Fossanova and Casamari the west front is no mere screen wall as it is in almost all mediæval Italian churches. It is in intimate relation with the plan of the whole church, and follows the outline of the nave and aisles.

The Gothic style was never thoroughly understood by the Italian architects, and was never fully developed in the peninsula. It was unsuited to the southern climate because of its large window spaces. Because of the great demands that it made upon the constructive skill of architects, it was not in harmony with the genius of Italian art. The mediæval Italians were decorators rather than constructors. Early in the fifteenth century they eagerly returned to those classical forms which were more suited to their climate and temperament than were the Gothic.

It was in or about the year 1224 that the Burgundian-Gothic style was first brought to the neighbourhood of Siena. Forty years before, monks from Casamari had founded a house on the slopes of Monte Siepi in the valley of the Merse, thirteen miles from the city. Under episcopal, aristocratic and civic patronage, the Cistercian settlement grew rapidly in wealth and influence. Early in the thirteenth century the new community had been augmented by the adhesion to it of several members of the most ancient families of Tuscany, Guidi and Visconti, Ardengeschi and Aldobrandeschi, as well as by the arrival of a body of monks from the mother convent of Clairvaux.

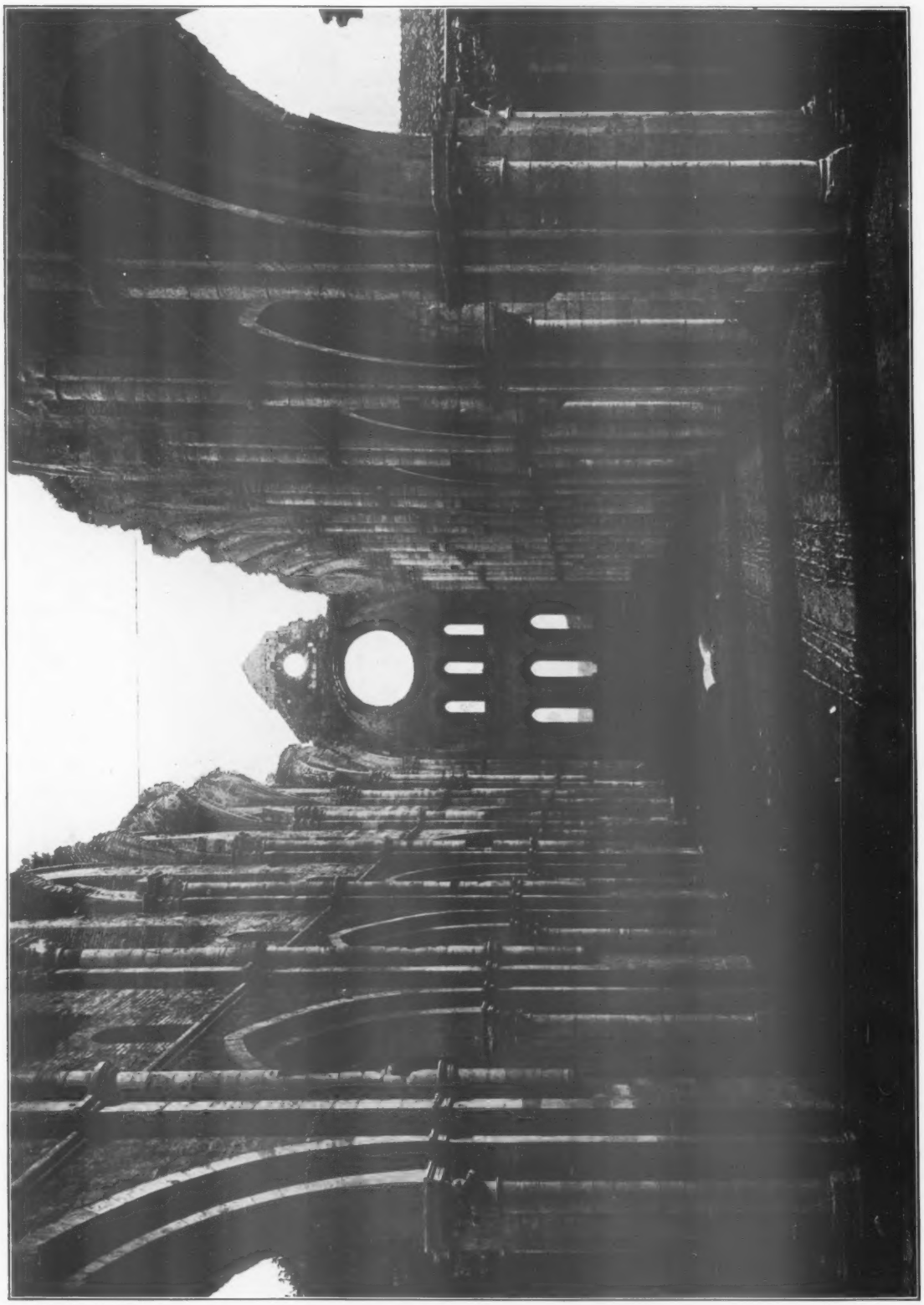
As the first quarter of a century was drawing to its close, the Cistercians began to build a great abbey somewhat on the plan of the mother house of Casamari. This new monastery they dedicated to the local saint, San Galgano.

The church of San Galgano, of which a great part of the original structure still remains, is closely allied to the contemporary Cistercian churches of Burgundy. The influence of the French Gothic of the Île de France, too, is seen everywhere. It is as though a piece of old France had been transplanted to Italian soil.* The first impression upon the traveller who finds this Burgundian abbey in a Tuscan valley is one of incongruity, of unexpectedness. Even he who journeys to San Galgano with some knowledge of the building he is going to see, cannot entirely get rid of this feeling. The monastery affects the mind in the same manner as do the windows of Fairford and of Shiplake. For in construction as in design it is very far removed from the other Gothic churches of Tuscany.

Such, then, were the three great schools of architecture at work in central Italy at the time when the Sienese began their new cathedral. We

* Cummings, *op. cit.*, vol. ii., p. 150.

* I find myself at variance here with the views ingeniously propounded by Signor Canestrelli in the second chapter of the second part of his admirable *L'Abbazia di San Galgano*. He exaggerates, I think, the direct influence of Lombard architecture upon the builders of the Cistercian abbeys in Italy, displaying, in my opinion, considerable patriotic bias. It is to be regretted that Italian art historians and art critics so often allow the sentiment of patriotism, civic or national, to warp their artistic judgment. This is the more to be deplored in the case of Signor Canestrelli, whose qualifications as a historian of architecture are of a very high order, and to whom all students of Italian architecture are deeply indebted. I cannot here discuss in detail the style of the Cistercian churches in Italy and the origin of that style. To do so would require a large volume. I can only recommend unbiassed students to study carefully Signor Canestrelli's own illustrations to his interesting book, as well as Mr. Cummings' chapter (*op. cit.*, vol. ii., chapter vii., pp. 123–153) on the Benedictine and Cistercian monasteries of Italy.



THE CHURCH OF SAN GALGANO. THE NAVE.

THE CHURCH OF SAN GALGANO. NORTH AISLE.

will now see how far that building reveals the influence of each of them. And first let us examine its constructive features. We find in the nave heavy square piers bearing an engaged column on each face. The column on the nave face of every pier is carried up through the capital. But instead of supporting the vaulting of the roof, as does a column similarly placed on the piers of the Cistercian churches, it merely helps to carry a wide cornice which divides the clerestory from the nave. Immediately beneath this cornice, and between the corbels which support it, are heads in high relief representing the Popes. In the spandrels, too, of the nave arcade are *tondi*, in each of which is a sculptured head. The four-part vaults of the roof are square in the aisles: in the nave they are oblong and pointed. In the clerestory are small pointed windows with traceried heads. The transept and the dome show great defects of construction. The lantern is built not on four piers but on six. The distances between the pillars are not equal. The form of the dome is that of an irregular hexagon. Above it becomes a dodecagon by means of squinches. It is not placed on the axis of the transept, nor does it cover the whole of the width of the nave and aisles. The northernmost of the supporting piers is not in a line with the north wall of the church, nor is the southernmost pier in a line with the south wall.

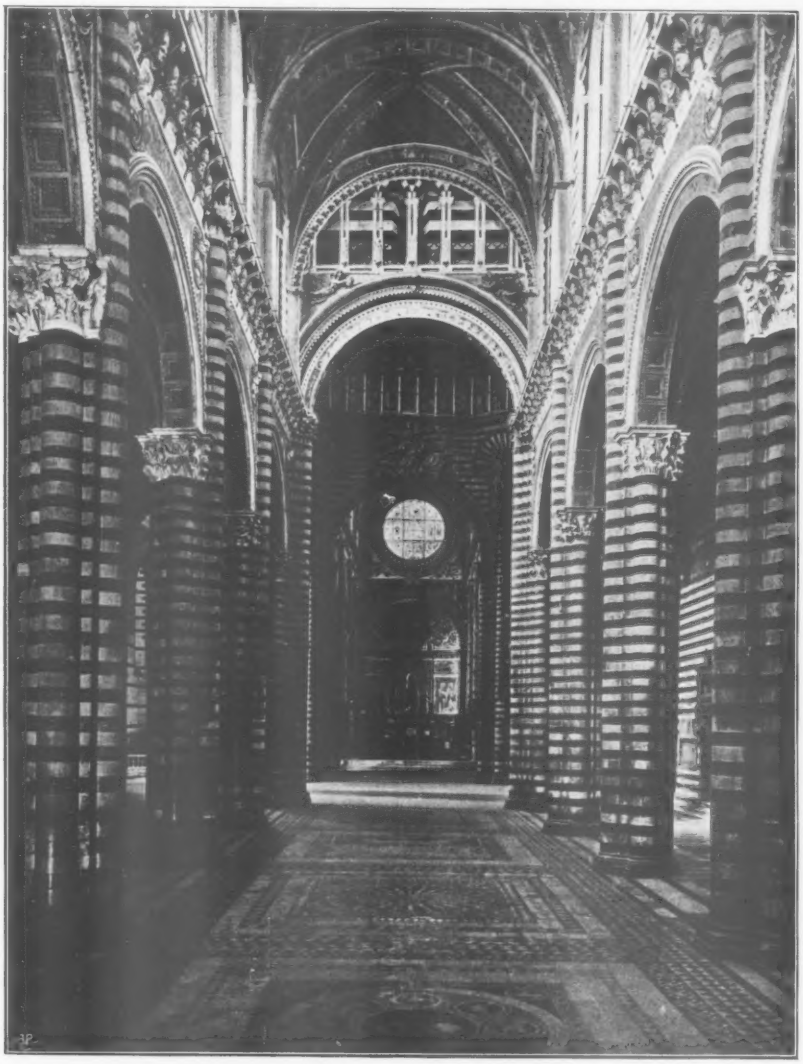
In all this, if we except the pointed, traceried windows of the clerestory, there is nothing—as Mr. Cummings justly observes—of a purely Gothic character, there is nothing that is not

to be found in other purely Italian churches of an earlier date. Square piers carrying engaged shafts on their faces and supporting four-part, ribbed vaults, in the aisles are to be found, as we have seen, at S. Ambrogio and in other early Lombard churches. In the Cathedral of Parma, built towards the close of the twelfth century, there are oblong bays in the nave spanned by four-part, ribbed vaults. We find pointed arches in the nave of a yet earlier church, S. Antonino, at Piacenza. In the Lombard Cathedal of Piacenza the lantern is not on the axis of the transepts, nor does it cover the whole width of the nave and aisles.*

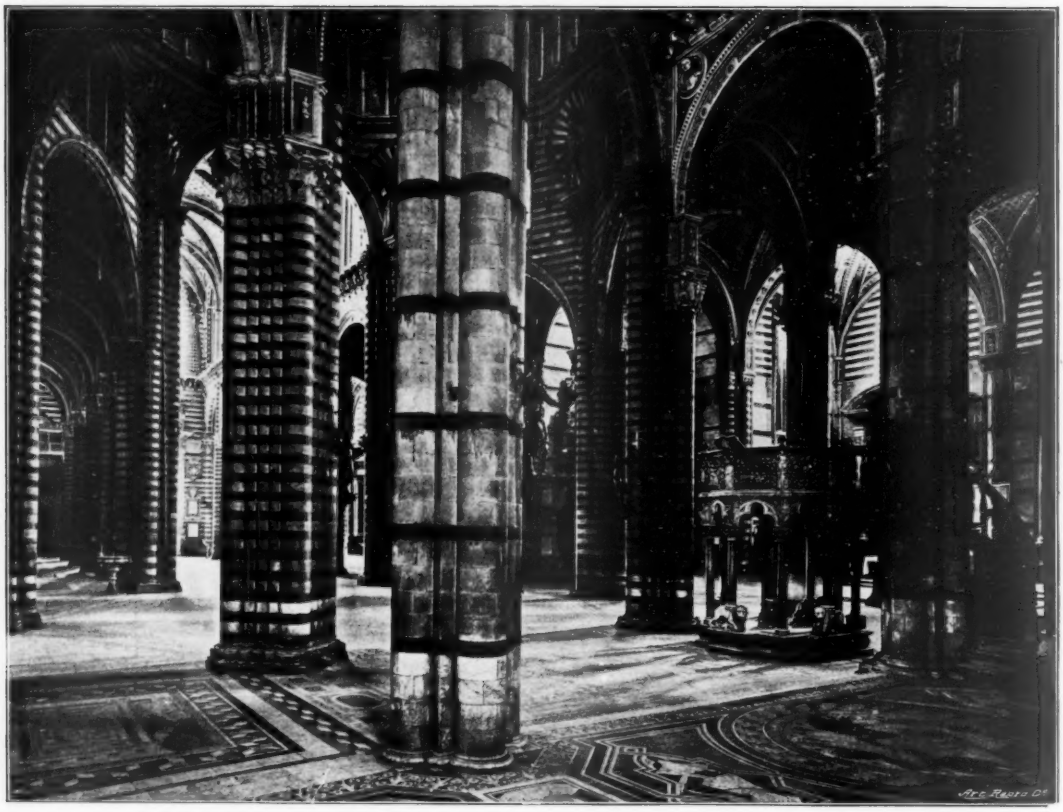
In the decoration of the church we find strong evidences of Pisan influence. Like the central Romanesque churches, the Cathedral of Siena is enriched with mosaic, fresco, and marble inlay. The interior of the lantern, too, is adorned with arcading. The alternate bands of black and white marble which are so conspicuous a feature of the interior were first employed in Tuscany, as we have seen, by artists of the Pisan school. The more restrained and educated taste of the Cistercian *operai* led subsequently to a modification of this system of decoration in the piers of the choir and transept, where the stripes of black and white marble were placed at wider intervals, occupying only one-fifth of the surface of the pier. Curiously enough, but little trace of the direct influence of Byzantine art is to be found in this cathedral of the city of Duccio.

The exterior of the present Duomo is more Gothic in appearance than the interior, but this

* Cummings (*op. cit.*, vol. i., p. 118) says that the dome of the Cathedral of Piacenza is perhaps the only dome that occupies only a part of the depth of the transept and is not centred on the axis of the transept. This, of course, is a mistake.



THE CATHEDRAL OF SIENA. THE NAVE.



THE CATHEDRAL OF SIENA. VIEW OF THE PRESBYTERY.

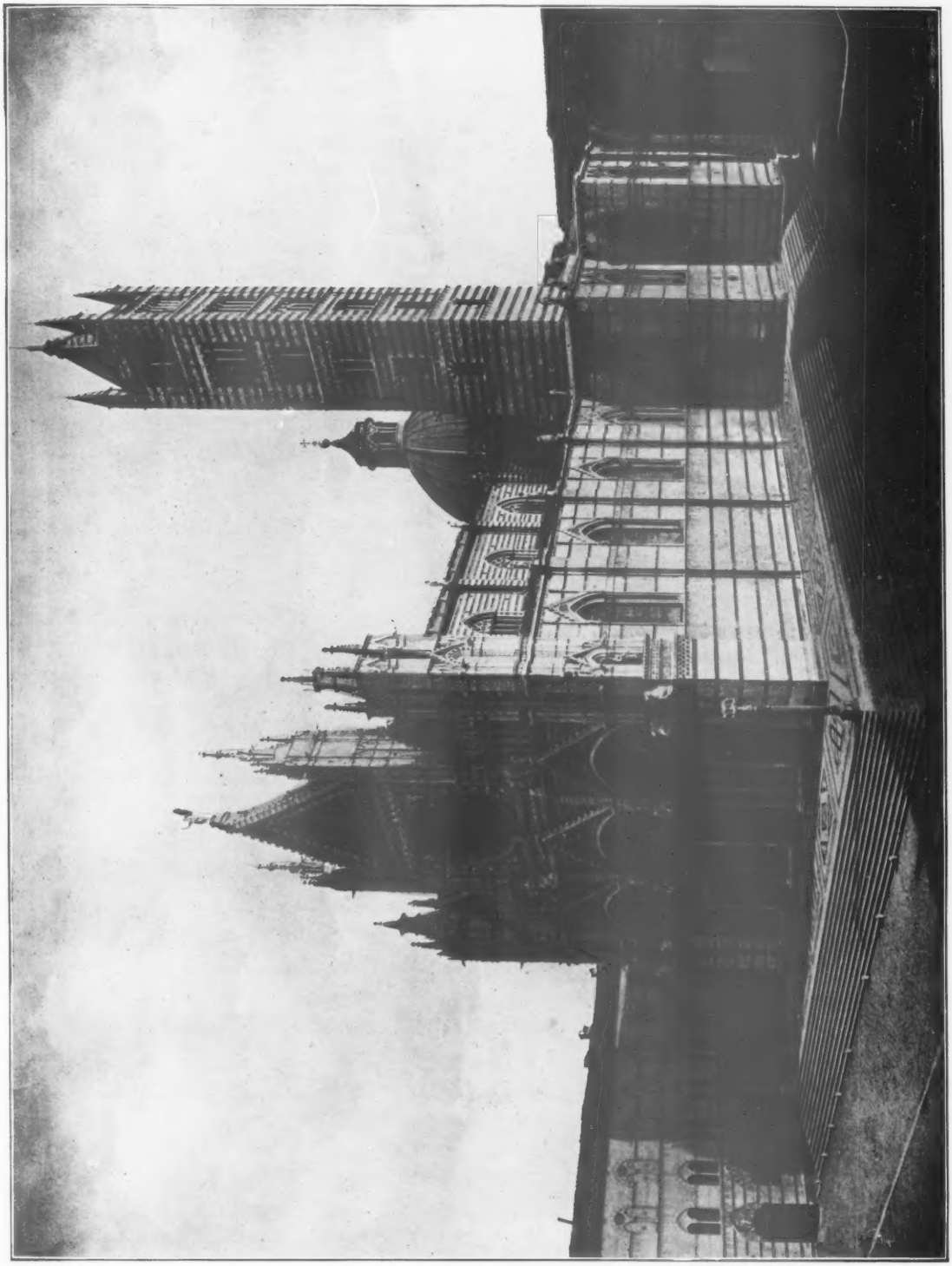
is mainly due to the effect produced by later additions to the church, and especially by the choir and the façade, both of which are of a much later date than the original church.

This too brief examination of the structure and ornament of the old Cathedral suffices to show that those recent writers have erred who, following Enlart, have asserted or implied that the church of San Galgano was the model of the Duomo of Siena, and that the first architect of the Duomo was a monk of the Cistercian abbey. Its architect had none of the peculiar gifts of the French builders. He displayed that lack of constructive ability which is so marked a characteristic of the Italian architects of the Middle Ages. At the same time he showed an Italian's love for rich interior decoration. Judging from considerations of style, it seems to me to be probable that the original architect of the Cathedral of Siena was some North Italian artist who had been brought under Pisan influences, and who borrowed some Gothic forms from the neighbouring monastery of San Galgano, without thoroughly apprehending the principles of Gothic construction.

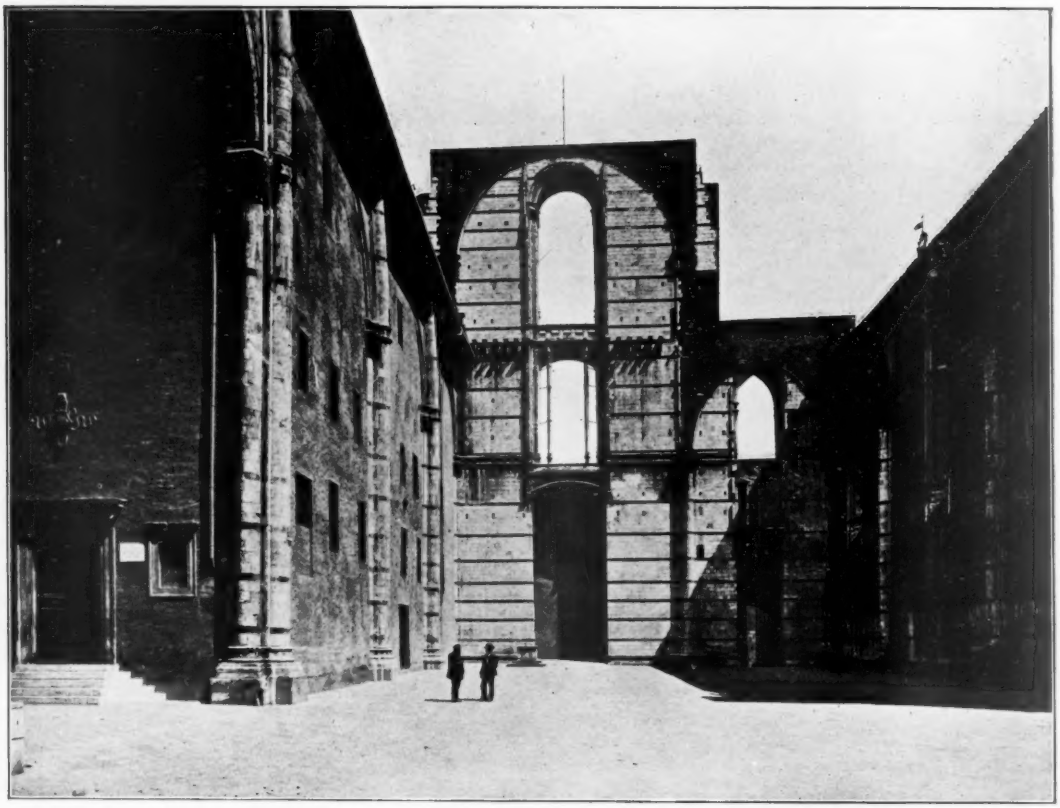
For half a century after 1267 no important architectural work now existing was undertaken in connection with the Duomo. Giovanni Pisano held the office of *Capomaestro* from 1284 to 1298, but no trace of his labour remains. But in the second decade of the fourteenth century a new epoch of architectural activity began. The Sienese had come to think that their cathedral was unworthy of so proud and wealthy a city as Siena. The rulers of the neighbouring towns of Florence and Orvieto had already set to work to build churches of larger dimensions than the Sienese Duomo. The inhabitants of the Virgin's City did not wish to be outshone by their rivals.

At first they merely proposed to make additions to the existing building. They determined to build a new baptistery and to enlarge the Cathedral by adding to it a large choir. The old baptistery of Siena had stood to the right of the façade of the Duomo. In or about the year 1315, the present church of S. Giovanni was begun to the east of the Cathedral and at a lower level. About the same time a choir was commenced above the new church, the roof of the latter serving as floor to the former.

In the year 1316, at a time when Camaino



THE CATHEDRAL OF SIENA.



THE CATHEDRAL OF SIENA. THE PIAZZA.

da Crescentino was chief architect of the Duomo,* the foundations of the façade of this building were already laid. Like the old baptistery, the new San Giovanni was considered to be an integral part of the Cathedral.†

The new work had not advanced very far ‡ towards completion before it was pronounced to be unsafe by a committee of experts, at the head of which was Lorenzo del Maitano, chief architect of the Duomo of Orvieto, and one of the greatest artists that Siena ever produced.§ The architects consulted advised the citizens to erect a new church "beautiful, large and magnificent, well proportioned in length, and height, and breadth, and in all its parts." This project was not at first adopted. The party in the government who favoured the alternative plan of adding to the original church, maintained their majority for a period of seventeen years, and, in spite of the defects of construction pointed out by Maitano and his associates, they succeeded in carrying on the work that they had begun.* At last, on August 23, 1339, the citizens finally decided to erect a vast new Cathedral, of which the nave and choir of the old Duomo were to form the transepts. Lando di Pietro, a distinguished Sienese architect, originally a goldsmith by trade, who had made the imperial crown for Dante's hero, Henry VII., was summoned from Naples, where he was in the service of Robert of Anjou, to act as chief architect of the new Cathedral of his native city. The first stone of the immense new nave which was to be erected to the south of the old Duomo was solemnly laid in the month of February, 1340.

As time went on, the plan of the Cathedral underwent considerable modifications. When the work was begun it was thought that the greater part of the old church might be incorporated in the new, and that it would only be necessary to alter or to rebuild the lantern, and to pull down the campanile of the earlier Duomo. Ulti-

* Dr. Lusini errs in saying that Tino di Camaino, the great sculptor, was chief architect at this time. That post was held by his father until 1319, when Tino took the office for a few months. See Lusini's *Il San Giovanni di Siena e i Suoi Restauri*, Florence, Alinari, 1901, p. 22, n. 2.

† *Frammento di una cronachetta senese* (Bibl. Com., Cod. C. VI., 12), edited by Lusini and Mengozzi (Siena, Sordomuti, 1893), p. 23.

‡ Mrs. Richter is mistaken in thinking that the Choir was finished under Camaino. See Richter, *op. cit.*, p. 37.

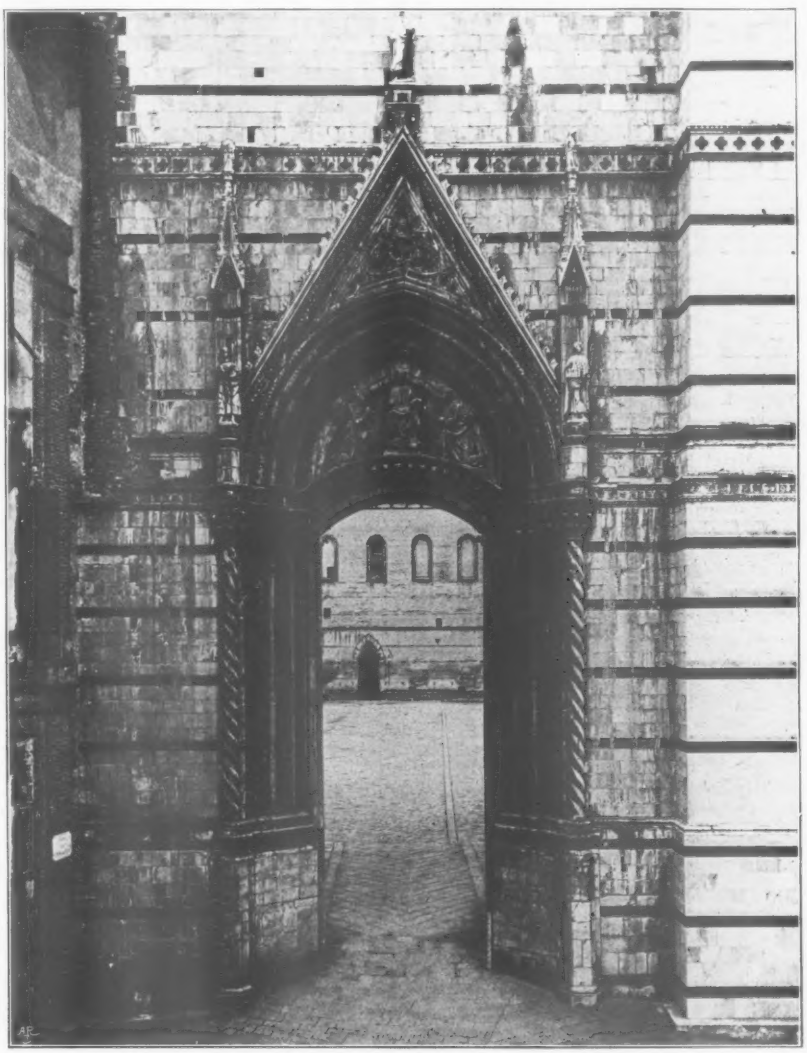
§ This was in 1322. See Milanesi, *Documenti*, etc., vol. i., No. 34, pp. 186, 187.

* Milanesi, *Documenti*, etc., vol. iii., p. 275.

mately, however, the *operai* found that their plan was impracticable. They determined to destroy all of the thirteenth-century church and to build an entirely new edifice. But in the meantime the old Cathedral was left standing, and all the efforts of the Board of Works were concentrated upon the erection of the new nave. At first the work of building proceeded rapidly. Even the great plague of 1348, which swept away by far the greater part of the citizens, did not put an end to it. But the ravages of the merchant companies, and the increasing frequency of faction-fights, impoverished the Sienese, and absorbed the energies which ought to have been devoted to projects of public utility. The work of the new Cathedral languished, in part because there was less wealth in the city than there had been twenty years before, in part because public spirit was becoming enfeebled in Siena. The *operai* were further discouraged when they found that half of the new building was giving way.

The piers were too light to support the weight of the vaults; and the Florentine architects whom the Sienese authorities consulted in their difficulty, counselled them to take down the unsafe portion of the work and to reconstruct it. The architect-in-chief of the Duomo, Domenico d'Agostino, and his assistant, Niccolò di Cecco, further advised that the old Cathedral should be allowed to stand, and that the new choir above San Giovanni should be finished.* The new Duomo, they asserted, would take one hundred years to complete. This work, they said, could

* Milanesi, *Documenti*, vol. i., No. 57, p. 252.



SIENA CATHEDRAL. DOORWAY INTO THE GREAT NAVE NOT PROCEEDED WITH.

be accomplished in five.* At the same time they did not encourage the abandonment of the hope that the new Cathedral might be completed. They urged the citizens to continue it "to the honour of God, and of His Blessed Mother the Virgin Mary, and of the Blessed St. John the Baptist."

But the magnificent project of the Sienese was doomed. The days of Siena's greatest wealth and glory were over. In June 1357, the Twelve decided that the unsafe portions of the new building should be pulled down. After that, there was no more talk of completing the immense Cathedral of Lando di Pietro. The Sienese contented themselves with enlarging and beautifying the old Duomo.

In accordance with the proposal of Domenico d'Agostino and Niccolò di Cecco they completed the choir above San Giovanni. In the year 1370, this portion of the work was finished.† In the same year they set about clearing the ground in front of the old façade by removing the loggia of the Bishop's palace which had been built in close proximity to it. At first they do not seem to have had any other object than to increase the size of the piazza before the west front, so that they might have a larger space for displaying the relics of the Cathedral.‡ But in the course of the next three years they adopted a much more ambitious project. They decided to enlarge§ the nave of the Duomo by the addition of two bays, and to build a new façade "on the spot opposite the Hospital where once was the loggia of the Bishop."‖ That the Duomo was enlarged in the years 1374-1377 is not open to doubt. Neri di Donato distinctly states it: the two westernmost bays of the Duomo differ in several important particulars from the rest of the nave: moreover, there is to be seen in the archives of Siena, upon one of the covers of the books relating to the management of the Hospital a rude representation of the original Duomo in which the church is depicted not only with a different façade to that at present existing, but also with a much shorter nave.

In the year 1377 the two new bays of the nave were completed, and Bartolommeo di Tommè, Giacomo di Buonfredi, and other sculptors were at work upon the statues and the sculptured ornament of the façade. Three years later the work must have been well-nigh completed, for we find that in 1380 St. Catherine's friend, Andrea Vanni, the artist, was paid a small sum for "colouring the face and hands of Our Lady, and of her Son," and of the other figures that were on the façade of the Duomo opposite the Hospital, on the occasion of the Feast of the Assumption.

The architects of the west front of the Duomo of Siena took as their model the masterpiece of one of the greatest of Sienese artists, Lorenzo del Maitano's beautiful façade at Orvieto. Their work was very inferior to their original, both in construction and decoration.*

The chief, but by no means the only cause of the inferiority of the façade of Siena is that it is not so intimately related to the structure of which it forms a part as is the façade of the Cathedral of Orvieto. At Siena, for instance, the ornamental framework of the three doorways is of equal breadth and height; whilst at Orvieto the central door is larger and nobler than the two others, emphasising the importance of the nave over the aisles. At Siena, too, there is little harmony between the upper and lower stages of the front. At Orvieto the whole design is in better proportion and better spaced.

There is a great difference, too, in the decoration of the two façades. At Siena there is an excess of sculptured ornament; and this excess makes appear the more incongruous the bareness of the central rose-window, which, unlike that of Orvieto, is without tracery. At Orvieto sculpture was much more sparingly used. There is a difference, too, in the character of the sculpture. When Lorenzo del Maitano designed the façade of Orvieto the influence of the Pisan school was still

* Neri di Donato, *Cronica*, in Muratori, *Rer. Ital. Script.*, tom. xv, c. 218. He states that the Choir was finished in August 1370.

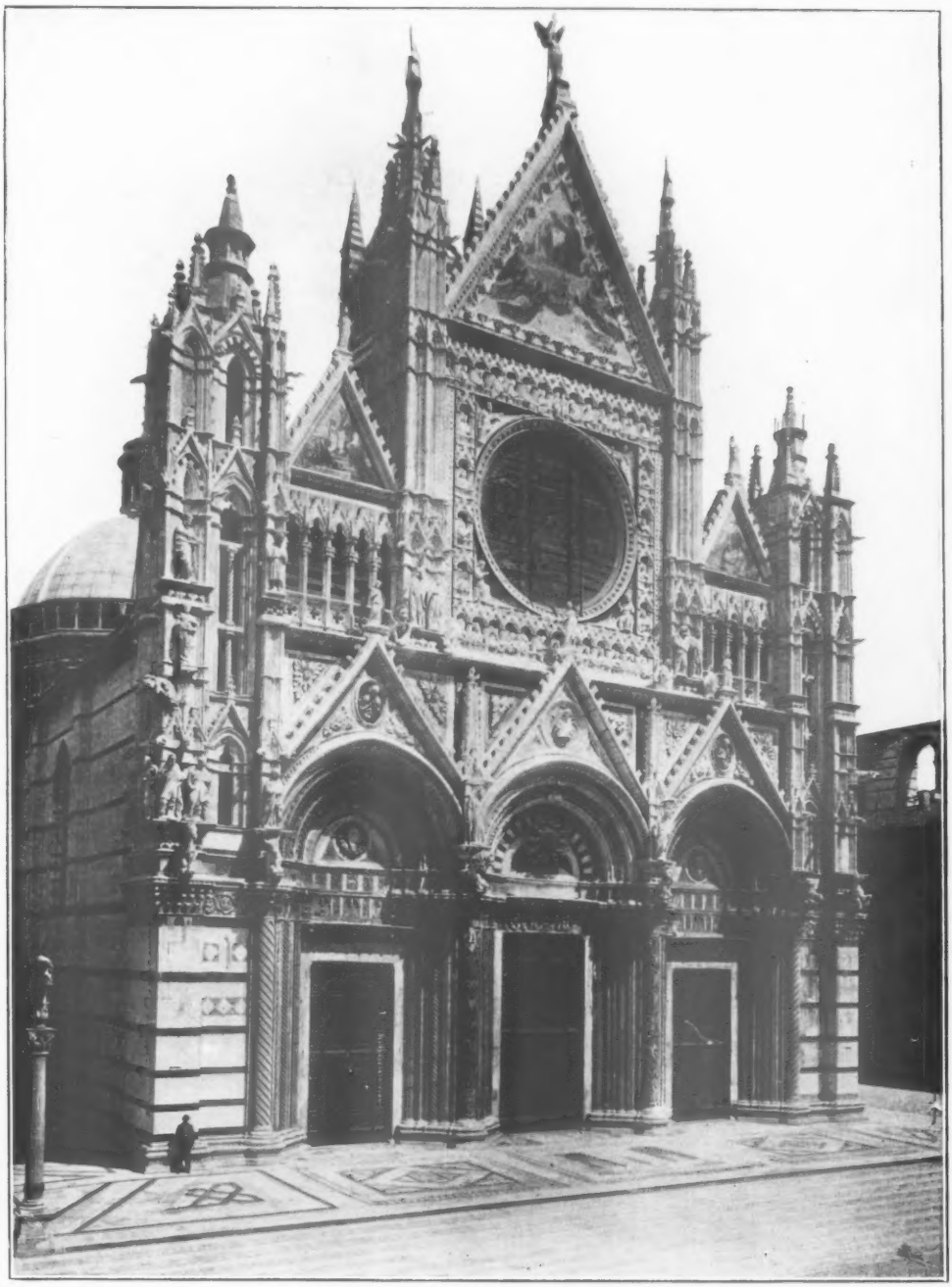
† Neri di Donato, *Cronica, ed. cit.*, c. 220. See also Arch. di Stato, Siena, *Libro dei Regolatori*, 1367-1377, fol. 200[1] and seq.—The Cav. A. Lisini discovered this entry. It was subsequently quoted, but not quite accurately, in Mrs. Richter's *Siena* and in her article published in this Review in September, 1901. It is strange that those who have written about the façade of the Cathedral of Siena treat this entry in this *Libro dei Regolatori* as an entirely new discovery, and are not aware that all the important information contained in this and other documents is to be found in a chronicle already printed, in the chronicle of Neri di Donato. In an appendix to my forthcoming *History of Siena* (Murray) are to be found all the extracts from Neri di Donato which throw light on the history of the façade, a correct copy of the entry in the *Libro dei Regolatori* of 1367-1377, and copies of three other documents relating to the façade.

‡ Neri di Donato, *Cronica, ed. cit.*, c. 220.

§ Neri di Donato, *Cronica, ed., cit.*, c. 241.

‖ Nardini-Despotti in his *Il Sistema Tricuspidale e la Facciata del Duomo di Firenze* (Leghorn, 1871, pp. 134-138) was the first to disprove the theory that Giovanni Pisano was the architect of the façade of the Duomo of Siena, as the Cav. A Lisini was the first to demonstrate conclusively that the present façade was built after the year 1370. Cummings (*op. cit.*, vol. ii. p. 180) merely repeats the traditional view that the façade "was the work of Giovanni Pisano."

* Mr. Cummings, being unaware that the façade of the Orvieto Cathedral is sixty years older than that of the Sienese Duomo, regards the former as an improved copy of the latter. Nevertheless, in making the usual comparison between the two façades, he shows keen powers of observation and considerable critical judgment.



FAÇADE OF THE CATHEDRAL, SIENA.

strong in Siena as elsewhere. Maitano himself belonged to the school of Giovanni Pisano. At Orvieto, therefore, we find that the sculptured ornament, as in the Pisan churches, mainly consists of reliefs. At Siena, half a century later, direct French influences were strong, and we find the Sienese façade decorated not with reliefs but with a profusion of figures in which we can trace the influence of the northern sculptors. At the same time the façade of Orvieto Cathedral* was early beautified by abundance of mosaic, which

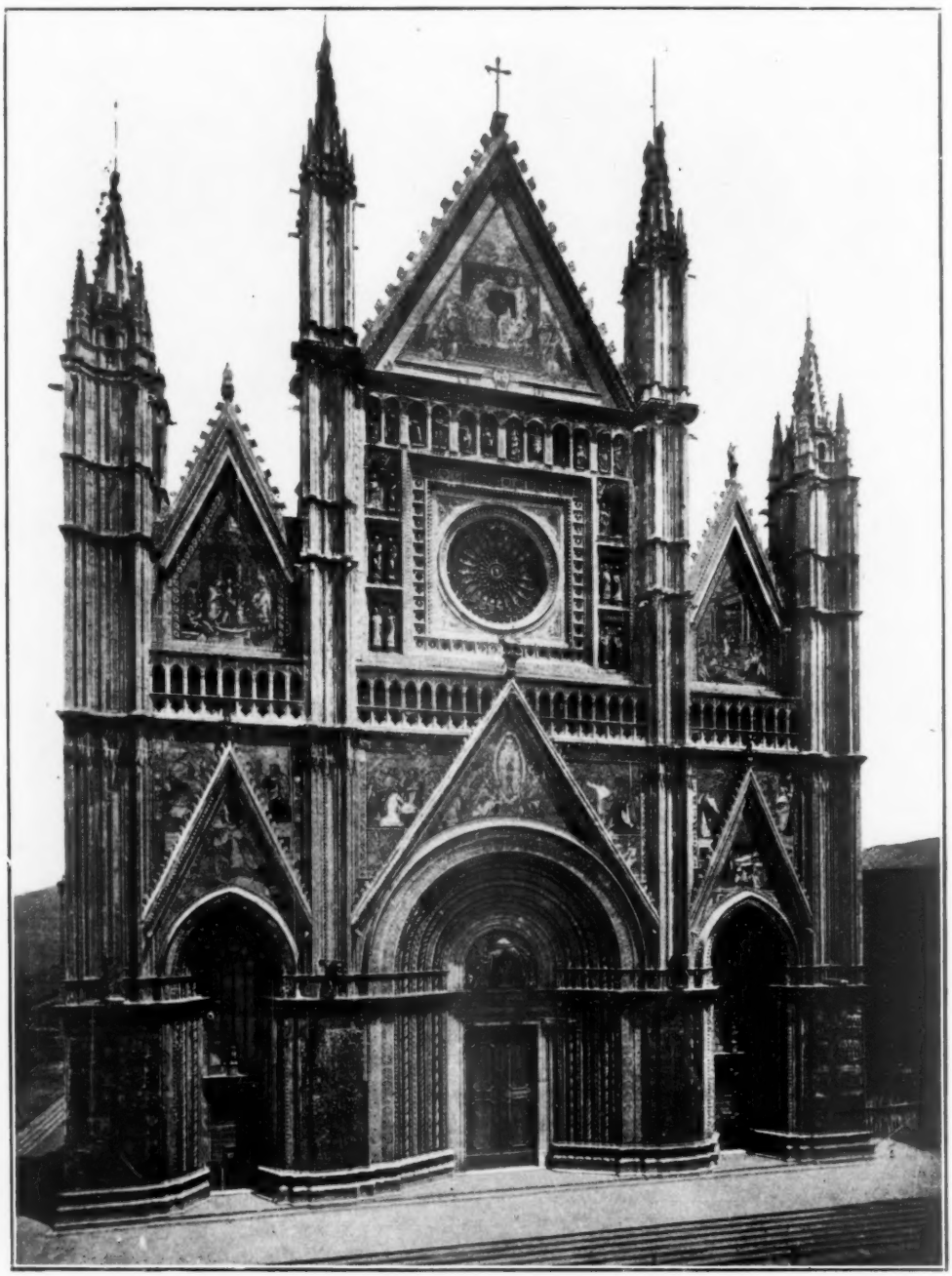
* Recent comparisons of the façades of the Cathedrals of Siena and Orvieto are based upon the assumption that structurally the latter façade has undergone no important modifications since the fourteenth century. This, however, is not the case. The façade underwent structural alteration in 1371 and in 1450-51. See Nardini-Despotti's *Lorenzo del Maitano e la Facciata del Duomo d'Orvieto, estratto dall' Archivio Storico dell' Arte*, anno iv, fasc. v., Roma, 1891.

covered it above like a beautiful garment. At Siena only the gables of the west front were adorned with colour.*

The façade of the Sienese Duomo has a certain effectiveness, but it is structurally faulty, and decoratively it is lacking in repose and dignity. And yet there is enough of pure beauty in it to make it a source of pleasure to the most exacting traveller; but it is a beauty that soon cloys and wearies. The whole composition is an artistic *tour de force*, brilliant but unsatisfying to the deeper æsthetic feelings.

The interior of the Duomo is more attractive than the exterior. On a bright noon in August, in which month the pictured pavement is uncovered, the appearance of the interior, although splendid, is somewhat bizarre. It is best seen at the hour

* The original decorative framework of the circular window—the fragments of which are now in the Opera del Duomo—was adorned with red mosaic; but as the panels of mosaic were small and of one dull red colour, they can never have had any prominence.



FAÇADE OF THE CATHEDRAL, ORVIETO.

of sunset. Then the sharp, perpetual antithesis of black and white becomes less glaring, less insistent. Niccola Pisano's pulpit, Vecchietta's tabernacle, Pintoricchio's fresco, Marrina's splendid doorway, and other objects of beauty fall into their proper place in the general decorative scheme. The clamour of monotonous contrast is subdued; and something approaching harmony, in which a warm brown is the dominant note, takes its place.

Of the later history of the Duomo little need be said here. The beautiful eastern façade, the façade of the Baptistery, was erected a few years later than the western, after a design by the painter Giacomo di Mino di Neri del Pelliciaio, a design which is still to be seen in the Opera del Duomo.* The smaller Baptistery in the north-west angle of the north transept was built by Giovanni di Stefano in 1482. The Piccolomini Library was added in 1495. The only subsequent addition to the Duomo that is of any importance is the Cappella del Voto, built for the old *Madonna* of Siena, the *Madonna* before whom the Sienese prayed on the eve of Montaperti.* This chapel, which is in the south-west angle of the south transept, was ordained by Alexander VII. in 1661.

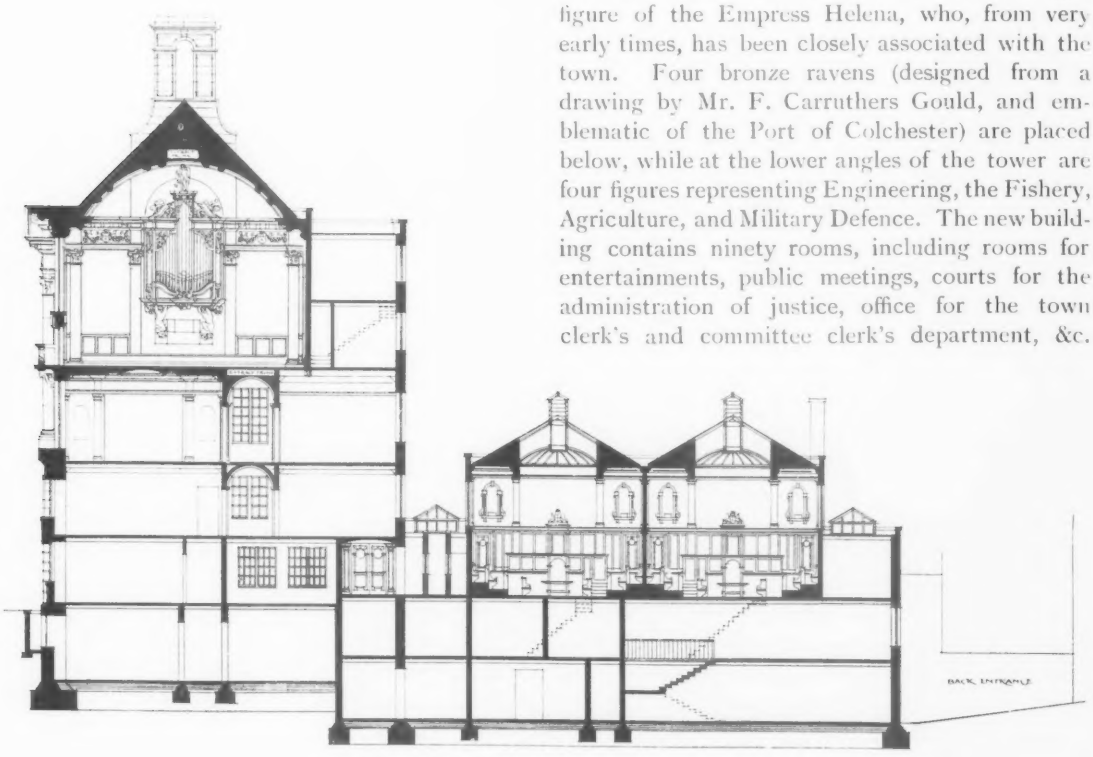
LANGTON DOUGLAS.

* Arch. dell' Opera del Duomo, *Lib. del Camarlingo*, ad ann. c. 39[t].

* Some modern writers, relying upon the authority of the *Guida artistica di Siena*, deny that the *Madonna del Voto* is the old *Madonna* of the Sienese. But there can be no doubt that this is the case; and the writer of the passage referred to in the *Guida artistica* himself subsequently admitted it. See the *Miscellanea Storica Senese*, anno 1893, vol. i. pp. 10, 11.

Current Architecture.

COLCHESTER TOWN HALL.—The new town hall at Colchester was designed by Mr. John Belcher, A.R.A., whose plans were selected in public competition, of which Mr. Norman Shaw, R.A., was the assessor. For the external work Hedingham red bricks and Portland stone have been used. The tower is surmounted by a figure of the Empress Helena, who, from very early times, has been closely associated with the town. Four bronze ravens (designed from a drawing by Mr. F. Carruthers Gould, and emblematic of the Port of Colchester) are placed below, while at the lower angles of the tower are four figures representing Engineering, the Fishery, Agriculture, and Military Defence. The new building contains ninety rooms, including rooms for entertainments, public meetings, courts for the administration of justice, office for the town clerk's and committee clerk's department, &c.



SECTION C.D

SCALE OF FEET

Photo: S. B. Bolas and Co.

COLCHESTER TOWN HALL. GENERAL VIEW.
JOHN BELCHER, A.R.A., ARCHITECT.

Photo: S. B. Bolas and Co.

COLCHESTER TOWN HALL. THE CORRIDOR AND STAIRCASE, PRINCIPAL FLOOR. JOHN BELCHER, A.R.A., ARCHITECT.

The law courts are panelled and fitted in oak. The main staircase is of marble, the treads of smooth white, the balusters of polished white, richly veined with black, the coping of the balusters of black polished marble, and the larger columns of a red Italian marble—altogether producing a very handsome effect. The council-chamber is elaborately carved and embellished with stained-glass windows, the decoration of the ceiling having been skilfully carried out by Mr. Charles Baskett and Mr. Charles Baskett, junr., from suggestions supplied by the architect. Messrs. Kerridge and Shaw of Cambridge were the contractors.

Photo: S. B. Boldas and Co.

COLCHESTER TOWN HALL. INTERIOR OF THE MOOT HALL.
JOHN BELCHER, A.R.A., ARCHITECT.

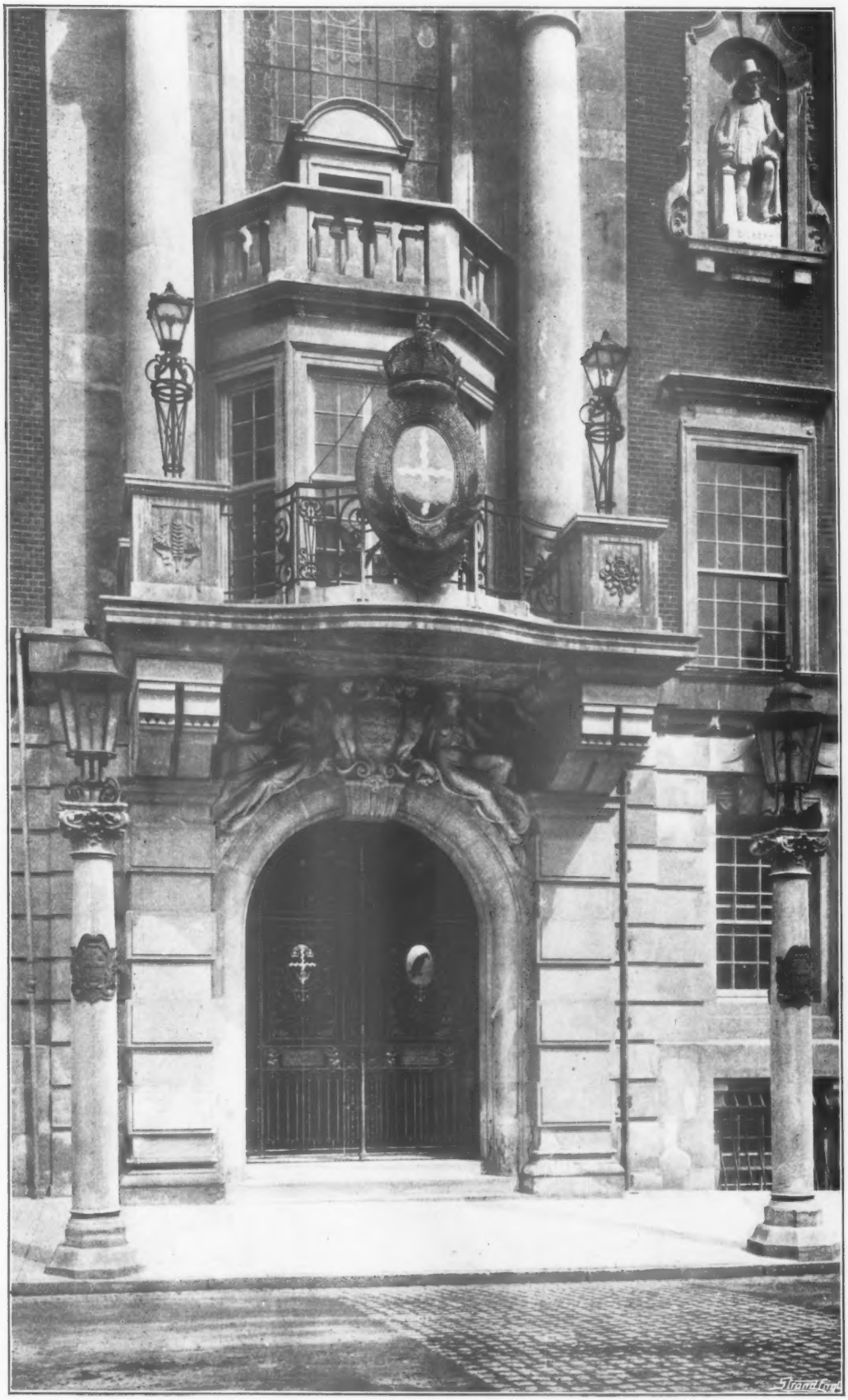
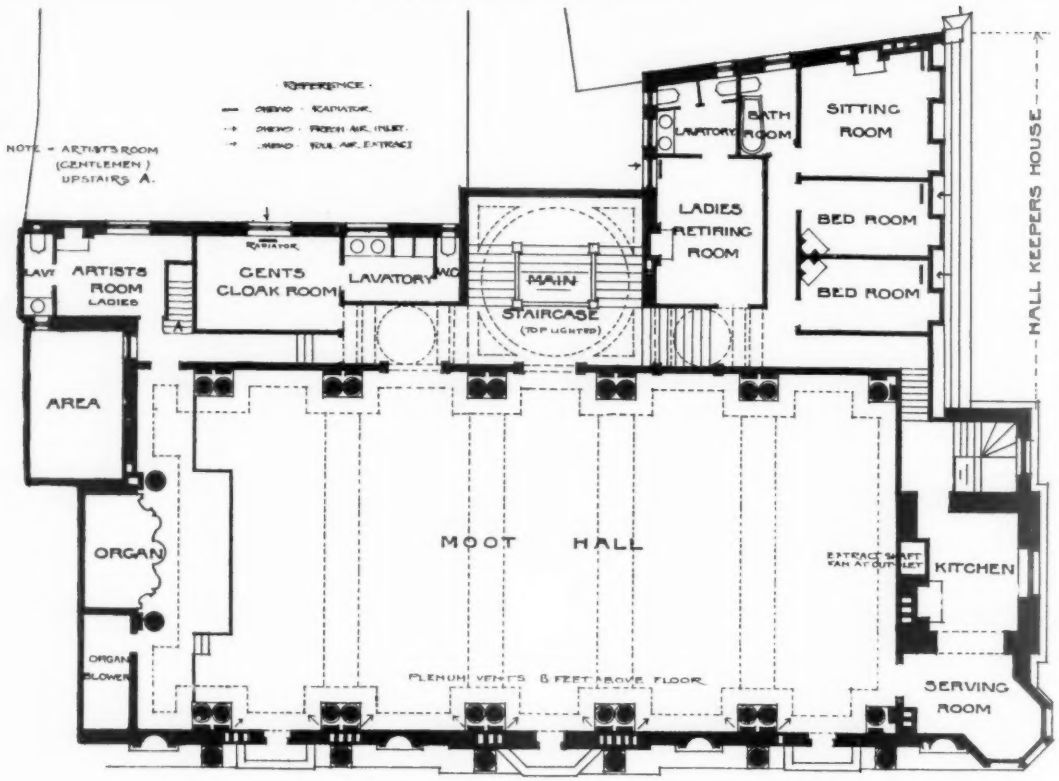
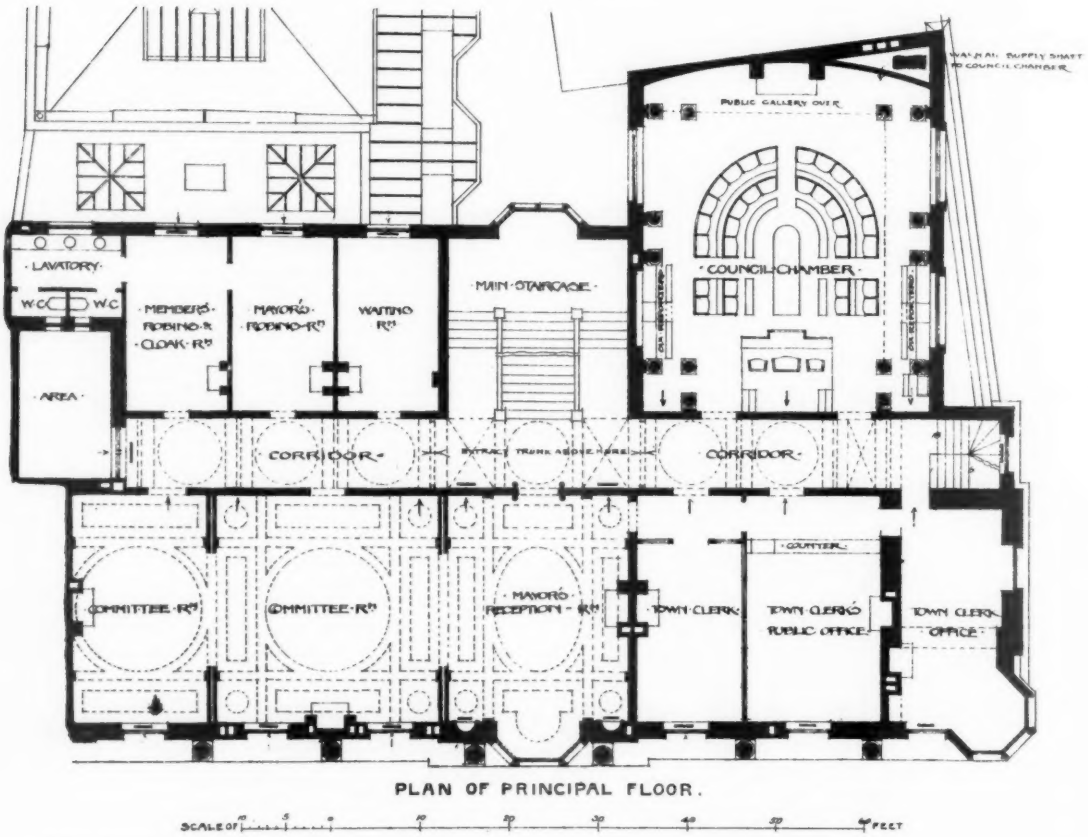


Photo : S. B. Bolas and Co.

COLCHESTER TOWN HALL. DETAIL OF ENTRANCE.
JOHN BELCHER, A.R.A., ARCHITECT.

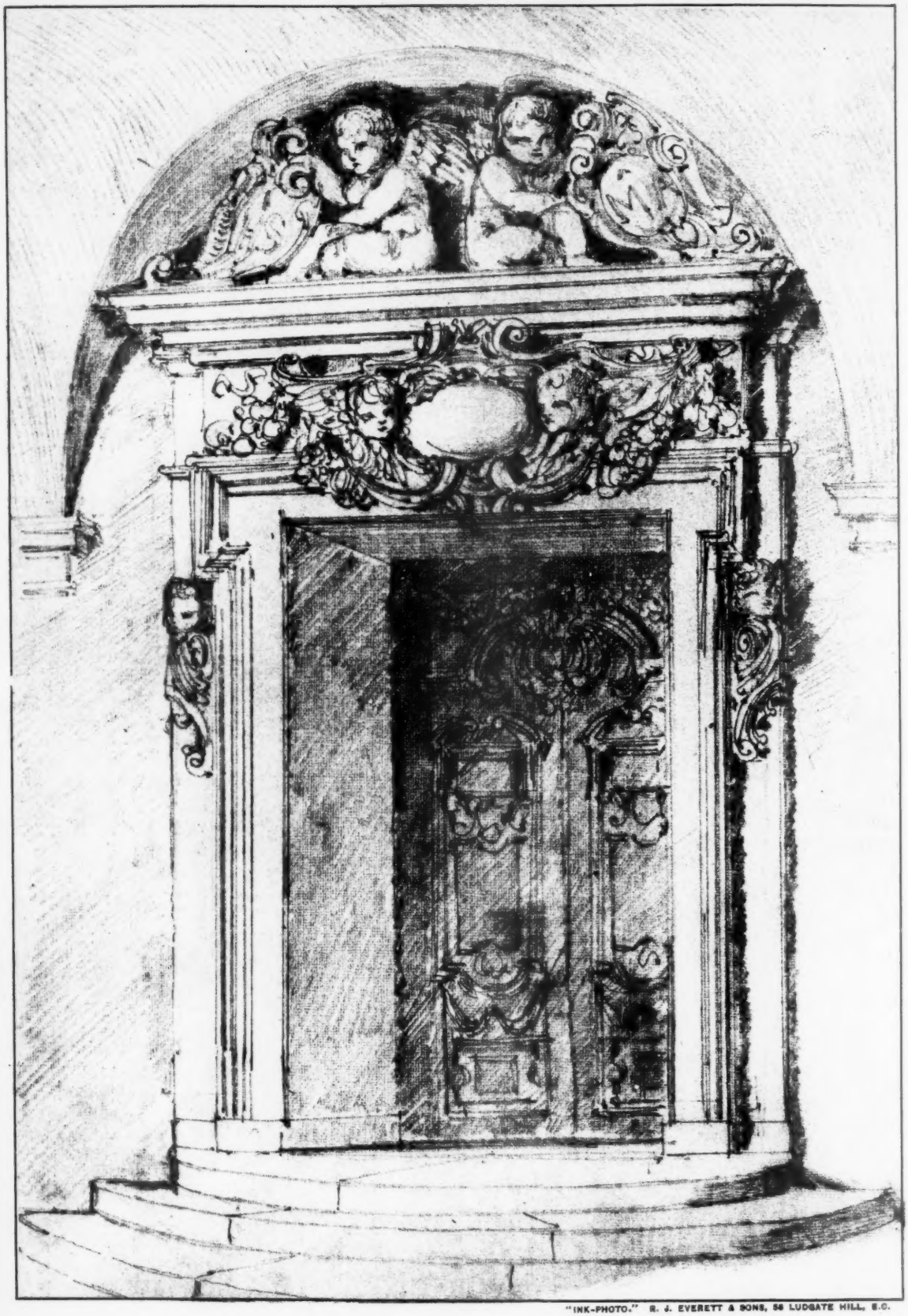


PLAN OF HALL FLOOR



PLAN OF PRINCIPAL FLOOR.

COLCHESTER TOWN HALL, JOHN BELCHER, A.R.A., ARCHITECT.



"INK-PHOTO." R. J. EVERETT & SONS, 58 LUDGATE HILL, E.C.

ENTRANCE TO THE CHAPEL OF LA TRINITÉ, FONTAINEBLEAU: (DATE ABOUT 1645).
DRAWN BY REGINALD BLOMFIELD.

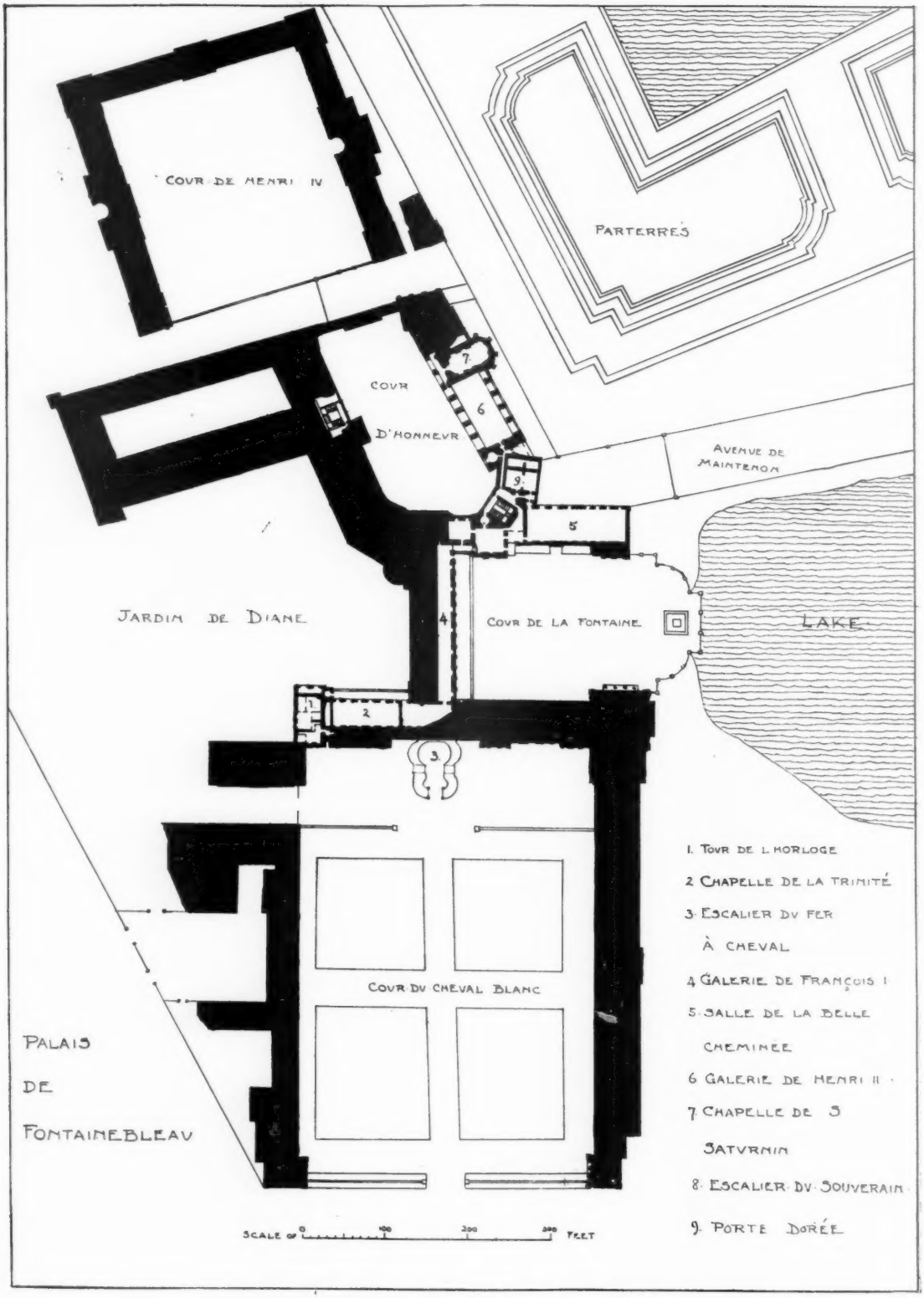
The Italians at Fontainebleau.

FONTAINEBLEAU may be said to be the cradle of modern French art. It was the scene of the last struggle between the master mason of mediæval building and the modern architect. It was here that the magnificence of the Renaissance first established itself in France, and that French artists learnt their lesson so effectually as to supersede their masters before the 16th century was over. The building itself, moreover, bears on its face marks of the vicissitudes of a strong and enduring art, an art which steadily advanced until in its turn it sank into decay, and was swept away in the cataclysm of the French Revolution. Few buildings in France, with all its wealth of architecture, are more profoundly interesting, more convincingly human, than the palace of Fontainebleau. In spite of the damage done by the vanity of Louis XIV. and the folly of Louis XV., it has maintained its life. It survived the tragic stupidity of the art of Napoleon I. Even the restorations of Louis Philippe and Napoleon III., though they have obscured its individuality, have not destroyed it, and the building remains to this day a great historical monument, convincing evidence, in spite of all that it has suffered, of the splendid vitality of French genius.

In 1528, François I. had a comprehensive plan prepared of a scheme for rebuilding Fontainebleau, and this plan, known as the "devis de 1528," still exists. The first idea was to construct a new palace at some little distance from the existing castle. This was carried out (it has since been partly destroyed and rebuilt), and it then occurred to the King that it was desirable to connect his new buildings with the old. Certain difficulties as to land were overcome, and the King is said to have sent to Italy for his architect. In 1532, Sebastian Serlio, of Bologna, published the first of his books on architecture, and completed the series in 1540. The book was at once accepted as a standard work (in fact, the first French edition of it appeared at Paris only five years later), and the story is that François sent him a present of 300 livres in gold, and an invitation to Fontainebleau to superintend his buildings. Serlio is said to have accepted the invitation, settled at Fontainebleau, and built the gallery of François I. Such is the legend, and it is repeated by M. Rodolphe Pfnohr, the author of an excellent, if somewhat inaccurate, guide-book to the palace. Serlio did indisputably come to Fontainebleau, and was appointed architect to the King in 1542, but his actual share in the building operations of the palace is very obscure. Indeed, M. Dimier,* the latest authority on Primaticcio, considers that Serlio had no actual share in them at all. The documentary evidence seems to be uncertain, and a comparative and critical study of the building itself affords almost the only clue available. I must add, by the way, that few buildings are more difficult to decipher than Fontainebleau; the place is so attractive that succeeding monarchs have cut it and carved it to meet their various standards of taste, and when the architects of the last century were at a loss for a motive, they seem to have put up the Salamander of François I., or the crescent of Diane de Poitiers, or the arrow and S of Gabrielle d'Estrées. Napoleon I. at least had his own thunderbolt, which he peppered about the building; and there is no mistaking the crowded wiry ornament of his architecture; but when we come to Louis Philippe and Napoleon III., a sort of paralysis settles on one's critical faculties, and the page is illegible. French archæological restorations are even worse than those of our Gothic revivalists. The French mind is so intolerantly logical that it is satisfied with nothing short of a clean sweep and a hopelessly complete re-edification.

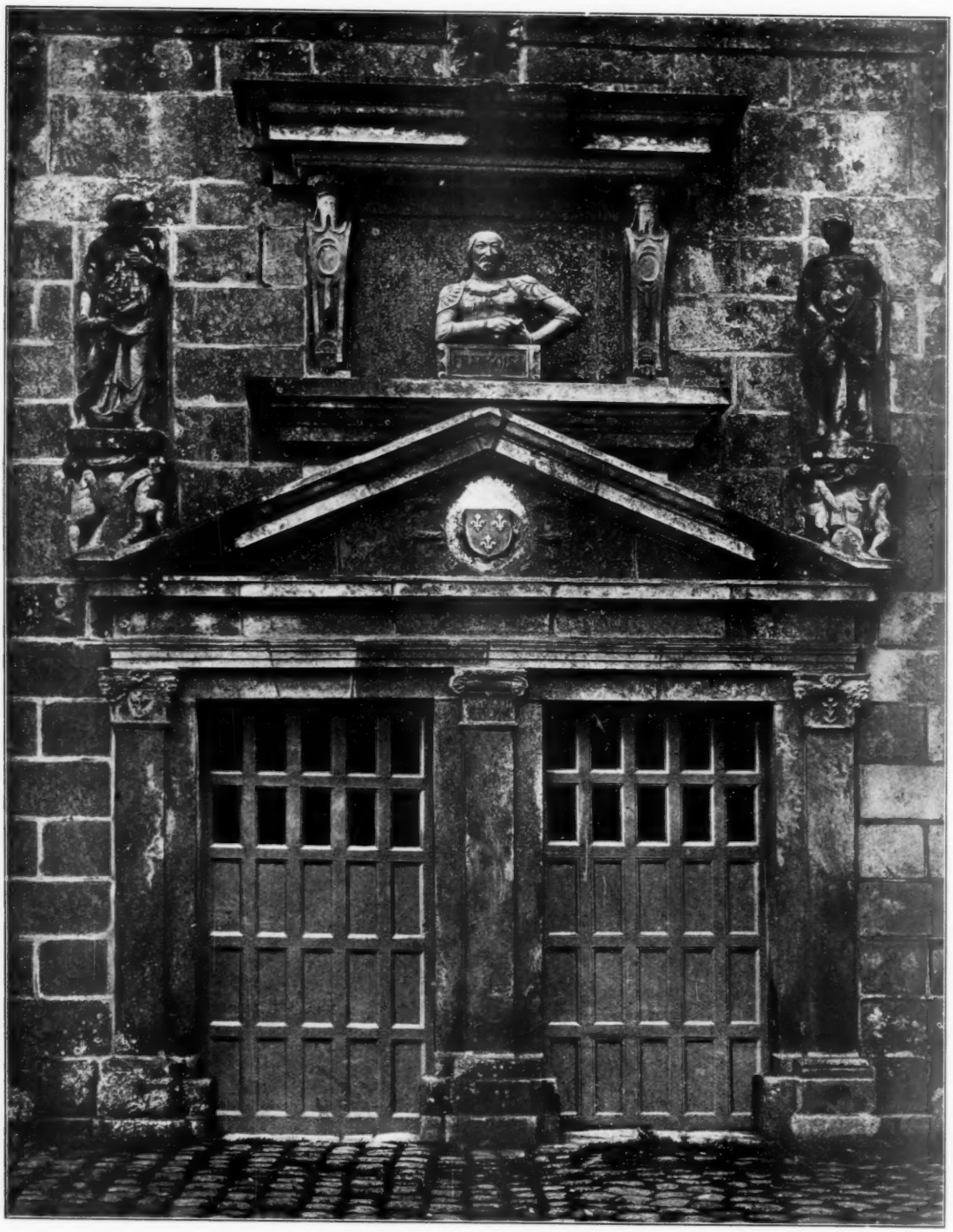
I have mentioned that, according to M. Pfnohr, François I. invited Serlio to Fontainebleau after the publication of his book, and, if the dates given are correct, Serlio can have had nothing to do with the "Devis" of 1528, that is with François' buildings begun in 1528, and continued in the succeeding years, or with the gallery of François I., as il Rosso and his men were at work on the decoration of this from 1533 onwards. If in fact it was in consequence of his book that Serlio was summoned to Fontainebleau, the earliest work that he can have undertaken there is the Salle de Bal, or Salle des Fêtes, generally known as the Galerie de Henri II. The famous Egyptian doorway in the earlier part of François' building, next to the Tour de l'Horloge, could not have been by Serlio unless it was a later insertion, or, rather, unless the Egyptian caryatides were built

* I must express my obligations to M. Dimier's admirable book, a work of great learning and ability, and authoritative on the painting and sculpture of this period. M. Dimier is less convincing in regard to architecture, and some of his conclusions are not borne out by the building. His views on the relations of architecture to the decorative arts are probably peculiar to himself.


COUR DE HENRI IV
PARTERRES
COUR D'HONNEUR
AVENUE DE MAINTENON
JARDIN DE DIANE
COUR DE LA FONTAINE
LAKE
COUR DU CHEVAL BLANC
PALAIS DE FONTAINEBLEAU
1. TOUR DE L'HORLOGE
2 CHAPELLE DE LA TRINITÉ
3 ESCALIER DU FER À CHEVAL
4 GALERIE DE FRANÇOIS I
5 SALLE DE LA BELLE CHEMINEE
6 GALERIE DE HENRI II
7 CHAPELLE DE SATURNIN
8 ESCALIER DU SOUVERAIN
9 PORTE DORÉE
SCALE OF FEET

THE EGYPTIAN DOORWAY. TOUR DE L'HORLOGE.

FROM A DRAWING BY THE AUTHOR.

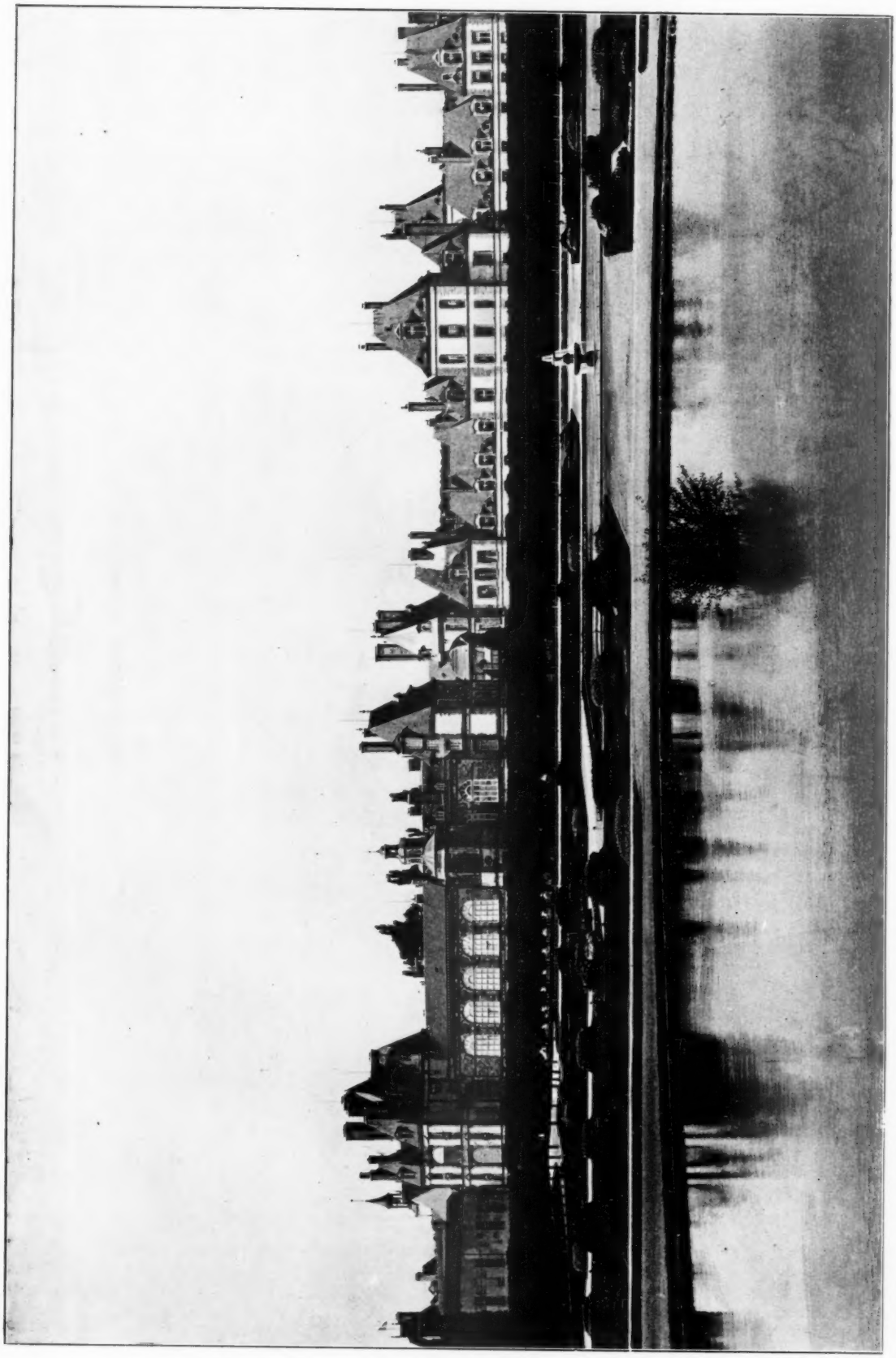


RENAISSANCE DOORWAY IN THE COUR OVALE.

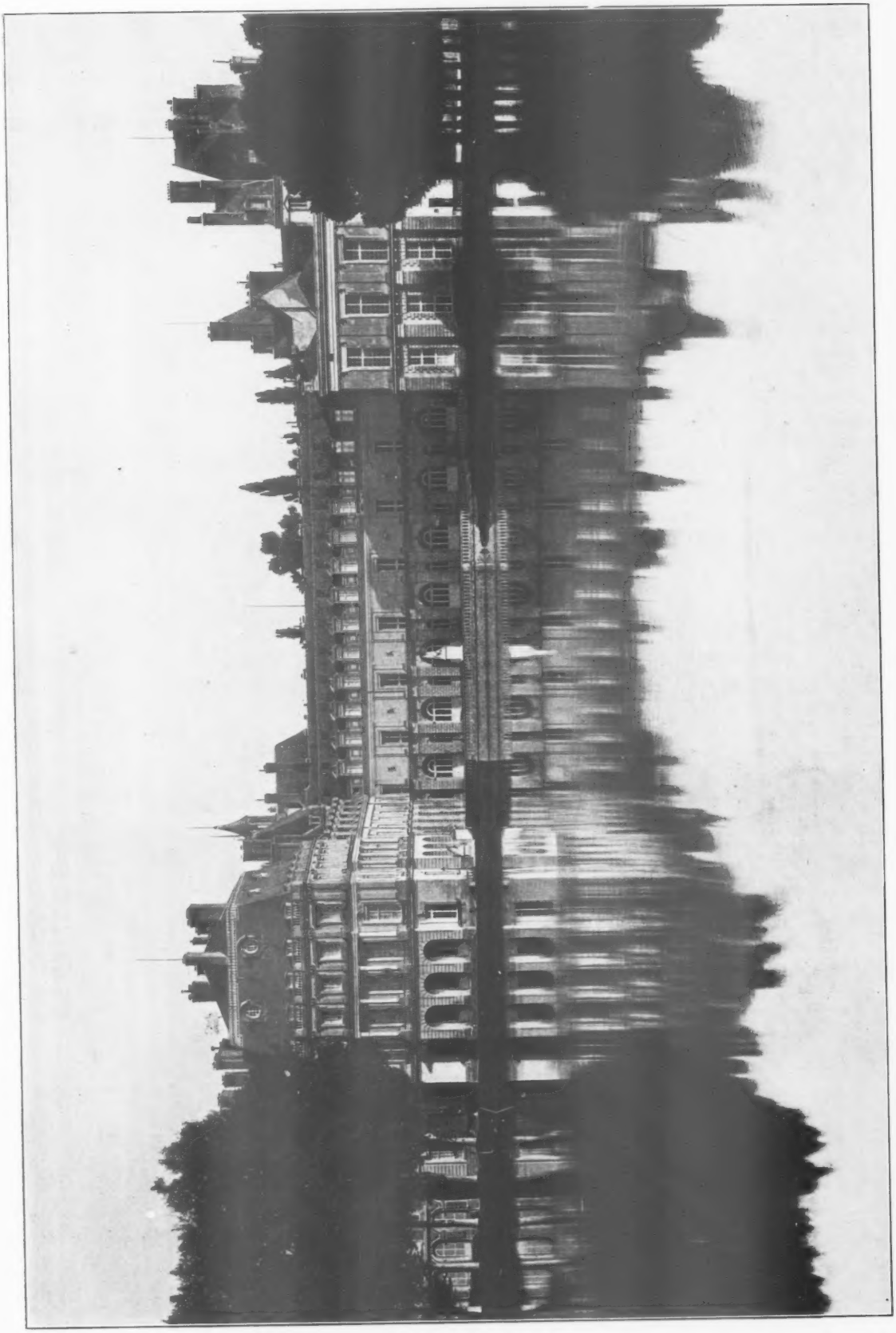
into an older door, as seems not improbable. The figures are queer, archaic-looking creatures, learned in their way, and unusual at so early a date. Serlio is said to have travelled in the East, and to have produced these curious imaginations as the result. Whether this is so or not, the figures are quite different in treatment to the amorini above, tumbling about under an enormous helmet. The doorway in the Cour Ovale, with a bust of François I. in the pediment, is certainly Italian of a sort, but this, too, seems to me earlier than the date of Serlio's work. Serlio was a pupil of Baldassare Peruzzi, the most masterly of all the architects of the Renaissance, and it is not probable that he would have been responsible for such immature detail as this Both this and the figures over the Egyptian doorway were probably by Italians introduced by François in the earlier years of his reign, or possibly survivors of that much earlier importation due to Charles VIII., after his Italian expedition of 1495; for the new fashion of François I. in the latter years of his reign was by no means the first attempt to introduce the Italian Renaissance into France. Probably the earliest example is the tomb of Charles of Anjou at Mans, executed by Laurana for King René in 1472. In 1498, Charles VIII. brought back with him from Italy four "ouvriers du bâtiment," three sculptors, two jewellers, and a gardener. Gaillon was begun about 1501, and the earlier and very interesting school of Tours sprang up, under purely Italian influence. To this school is to be attributed most of the earlier Italian Renaissance work in France, and more particularly the details of most of the châteaux of the Loire valley. But meanwhile the Renaissance in Italy had been advancing swiftly; new schools had arisen, new ideas had developed. In architecture more particularly the architect had emerged in that full equipment of skill in design and scholarship which is a stumbling-block and a rock of offence to certain of his successors of to-day. The earlier Italian effort had become old-fashioned, even in France, and when François I. seriously set to work to decorate his palaces, new men had to be brought in from Italy,* and thus began what is somewhat inaccurately called the school of Fontainebleau, the true source from which modern French art has sprung.

These men, however, with the exception of il Boccador, the architect of the old Hôtel de Ville de Paris, were all decorators, and it is certain that all François' earlier work at Fontainebleau was carried out by French masons, such little carving as there is being left to Italian workmen. It is evident that the first introduction of the Renaissance into France followed much the same lines as it did in England. Carvers and ornamentalists straggled over first, and it was not till the taste became set that the bigger men thought it worth their while to leave Italy. It is only in the flat pilasters and their capitals, as for instance in those that adorn the Tour de l'Horloge, that the hand of the Italian workman is evident, and a blundering attempt at Roman mouldings was made in the rudimentary entablatures subsequently copied in other parts of the building; that is to say, the masons and the builders were Frenchmen, but the carved ornament, such as it was, was by Italians. The result, *mutatis mutandis*, was the same as in England; that is to say, the French builders followed their own tradition, they piled up picturesque masses of buildings with steep roofs, broken outlines, and towering chimneys; their manner of design was a sort of regularized Gothic—far away, it is true, from the stern severity of the mediæval castle, but scarcely closer than the latter to the architecture of Giuliano or Antonio da Sangallo or Baldassare Peruzzi. A Renaissance capital and pilaster here and there did not alter the type, any more than the medallions of the Roman Emperors in Hampton Court or the Château de Madrid made these into Classical buildings; and it was not till the new man of the Renaissance appeared upon the scene, the architect proper, who had studied his art as an art, and who worked by thought and knowledge rather than by inherited instinct, that a real and organic change occurred in the architecture of France. It does not appear that François I. had any such architect in his service till towards the end of his reign. As is usual with the amateur, he approached architecture through painting and sculpture, probably conceived of it only as a necessary background and occasion for those arts, and after he had bought his experience in his favourite arts it occurred to him that an experiment in architecture would be interesting, and that he could not do better than intrust it to Serlio, the latest authority on the subject. In point of fact it was not till after the Peace of Cambrai (the Paix des Dames) that François had much leisure to attend to the arts. That peace was the end of a long series of disastrous undertakings, and even the vanity of François was not proof against their lesson, that he had better stay at home and mind his own affairs. François undoubtedly possessed a fine personal courage and a genuine passion for the arts; but he was in every sense of the word an amateur, a man with no grasp of facts; and his only achievements of permanent value were his foundation of the

* Jerome della Robbia, who made the plaques for the old Château de Madrid, came in 1527; Rustici and Naldini, bronze-workers, in 1528; Pellegrino about the same time; and il Rosso in 1531.



FONTAINEBLEAU FROM THE PARK.



FONTAINEBLEAU FROM THE PARK.

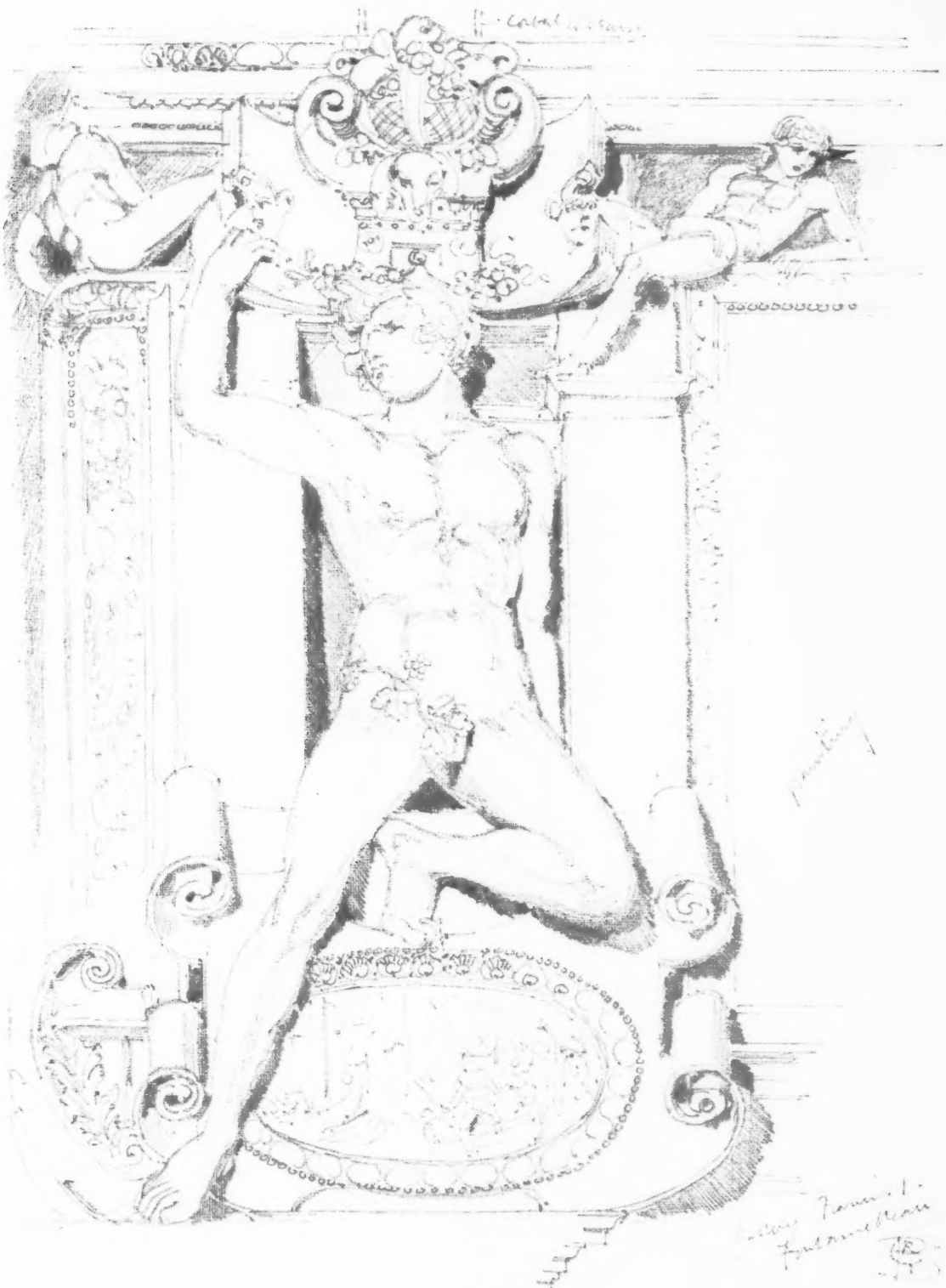
Collège de France, his library, and his very intelligent patronage of Italian artists.

His first venture in this direction, after the successful campaign of 1515–16, was a failure. His chief idea seems to have been to get hold of painters and pictures. He tried to bring back Leonardo's "Last Supper" from Milan, but failing in this brought back Leonardo and three Italian painters. But Leonardo was old and feeble, and in fact died within two years of his arrival. Andrea del Sarto succeeded him, but Andrea hated France. He had a wife in Italy, and having obtained large sums of money from François for the purchase of statues and pictures, he returned to Italy, where he spent the King's money on his wife,* and died of the plague in 1530. François' next attempt was more successful. This time he induced il Rosso of Florence (Maître le Roux, the red-haired painter) to come to Fontainebleau (according to Vasari, il Rosso came of his own accord), and he arrived there in 1531, with a company of painters and sculptors, mostly Florentines. To these he added certain Italians already at work in France. The names of these artists and their payments are given in the book of charges of the Sieur Babou de la Bourdaisière, superintendent of the buildings of Fontainebleau, 1535–44, viz.:—

1533–44, Barthélemy da Miniato, peintre Florentin, stucs, à 20 livres par mois.
1534–35, Laurent Regnauldin (or Naldini), stucs à 20 livres par mois.
1534–36, Claude du Val, stucs, 10 livres par mois.
1534–35, Francisque Pellegrino, stucs, 20 livres par mois.
1535–36, Badouin, peintre Florentin, stucs, 20 livres par mois.
1535–36, André Séron, 20 livres par mois.
1535–36, Symon le Roy, imager, stucs, 20 livres par mois.
1535–36, Jean Anthoine (or Jean de Majoricy), peintre, stucs, 20 livres par mois.
Charles Dorigny.
Juste de Just.
Josse Fouquet,
1538, Léonard Thiry.

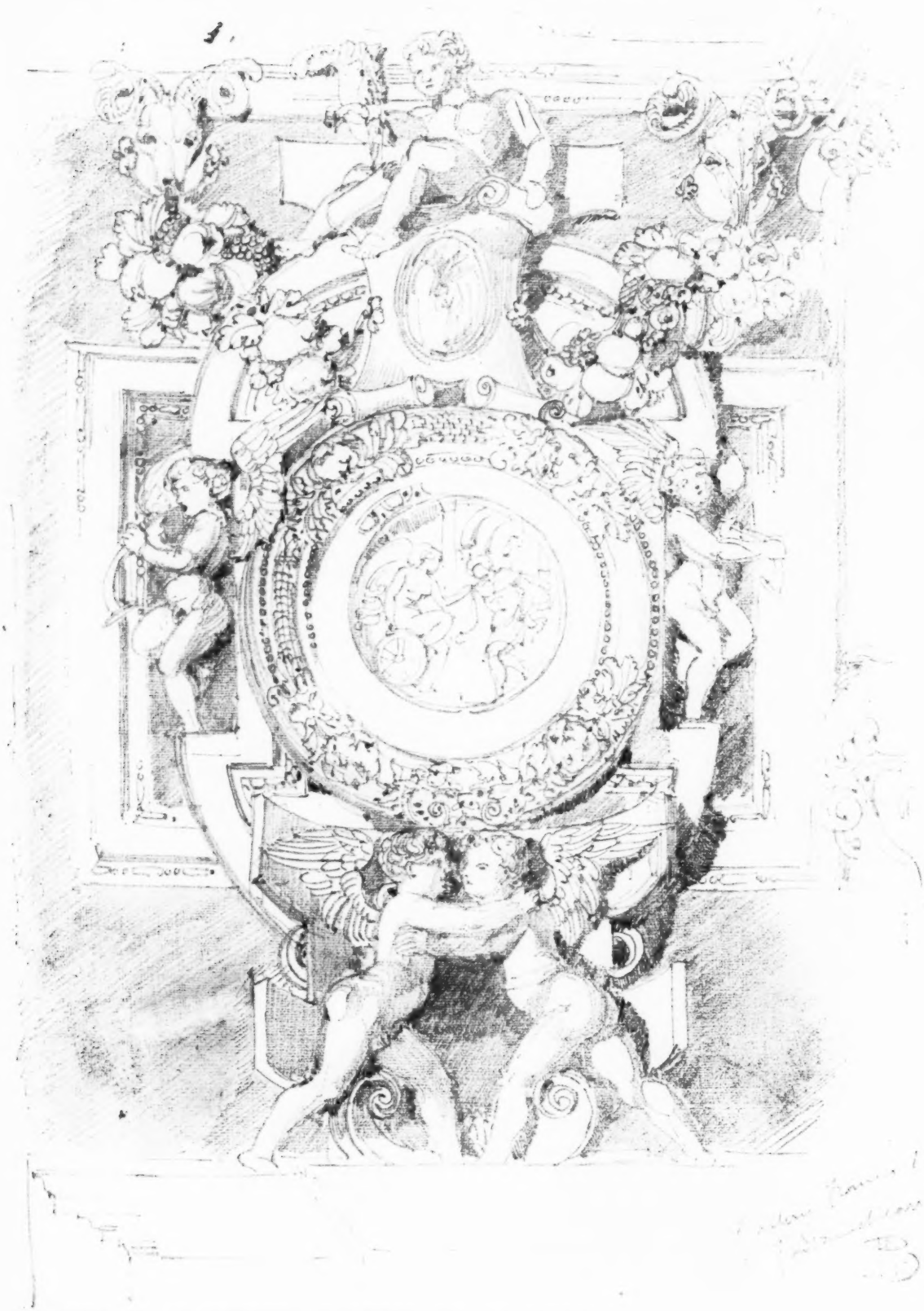
The two latter are described in the accounts as Flemings. M. Dimier says Leroy, Dorigny, and Badouin were Frenchmen; but in the case of Badouin either he or M. Pfnohr must have transcribed wrongly from the accounts. The rest were Italians. At the end of the list appears the name of "Maître Roux de Roux, conducteur desdits ouvrages de stucs et peintures dudit lieu," with a salary of fifty livres a month, in addition to which il Rosso had a house at Paris, quarters at Fontainebleau, a canonry of the Sainte Chapelle, and various benefices thrown in. "Altogether," says, Vasari, "he lived like a nobleman." François I. had annexed the patronage of the Church, and used it freely to reward his favourite artists, a point in his favour as compared with our own Henry VIII., who also had his band of foreign artists, but paid them, with the exception of Holbein, on an illiberal scale, and treated them with contumelious indifference. Il Rosso worked at Fontainebleau till his death in 1541, when he poisoned himself in an agony of remorse for having falsely accused one of his assistants. During this period il Rosso was designer in chief in all the arts to the court; he painted eight large pictures for the Porte Dorée leading to the causeway between the lake and the lower garden, and decorated the Gallery of François I. with paintings and stucco ornaments. This gallery, which runs from the Cour du Cheval Blanc to the Pavillon de St. Louis, is 64 mètres in length by 5·85 in width, and about the same in height. It is panelled in walnut, richly carved, for a height of 2·25. The present panelling is a copy of the old, which was carved by an Italian, Scibec, of Carpi. Above this panelling the walls are covered with paintings of allegorical and classical subjects, framed in cartouches freely decorated with swags, amorini, and figures. It is difficult to form any opinion as to the value of il Rosso's painting, as hardly any of his original work is left. Van Loo repainted the whole of the south side for Louis XV. in a deplorable manner, and the remainder were restored by M. Alaux in 1862. M. Alaux was also responsible for the atrocious painting of the Nymph of Fontainebleau (the fourth on the right opposite the windows). In so far as one can judge from the work that remains, il Rosso was a very competent if somewhat hard and mannered draughtsman, but his colour was uninteresting, in fact hardly exists. I have a general impression of dirty pinkish brown relieved by grey, and there is nothing in this work at Fontainebleau to recall the charm of his flesh painting, which Vasari particularly commends. The stucco ornamentation, however, shows an extraordinary accomplishment. These Florentines seem to have reeled off amorini and fruit and flowers as easily as a modern architectural carver would turn out his yards of egg and tongue. There is no hesitation about the work, no shirking of the difficulties of the figure, no ignorant failure to express the idea imagined; the figures are free and ingenious, well designed and modelled, with all that happy vitality of expression that one finds in mature Florentine sculpture. The actual work-

* This is Vasari's story, accepted by M. Dimier. The story, however, is not borne out by the evidence of the King's accounts.



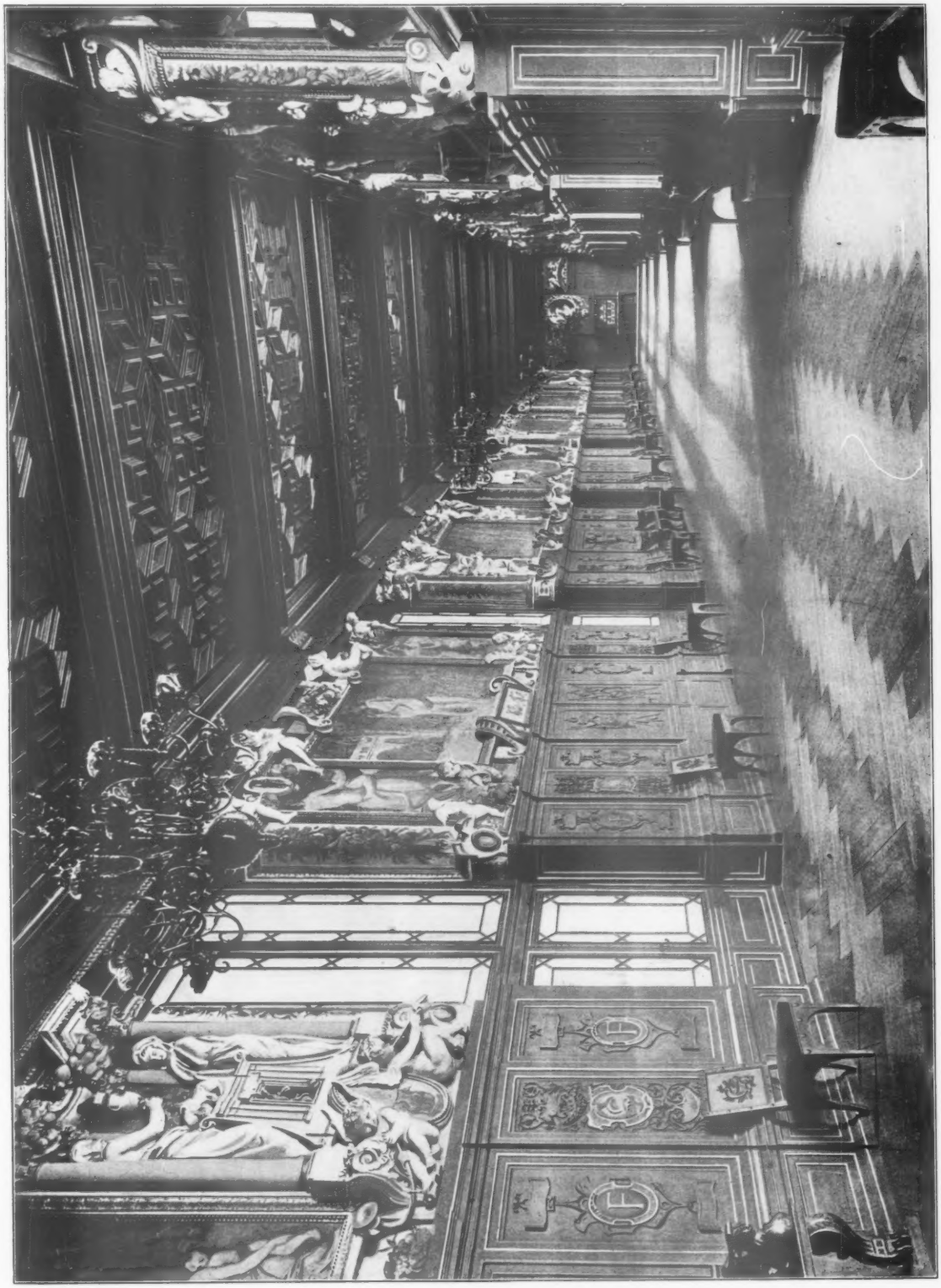
STUCCO FIGURE IN GALERIE DE FRANÇOIS I.

FROM A DRAWING BY THE AUTHOR.

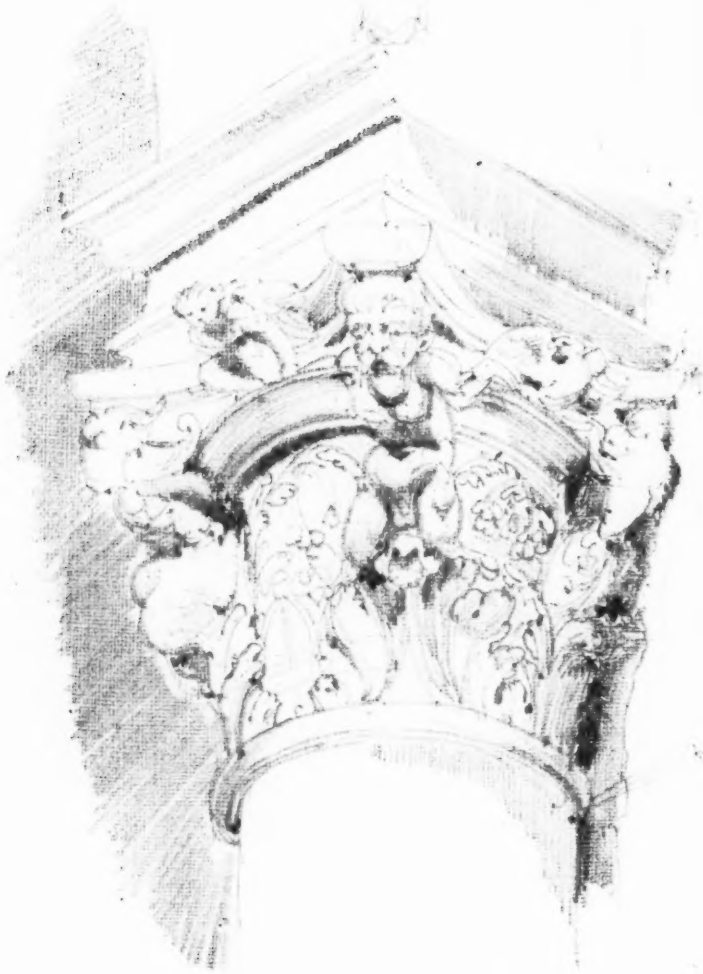


CARTOUCHE IN STUCCO. GALERIE DE FRANÇOIS I.

FROM A DRAWING BY THE AUTHOR.



GALERIE DE FRANÇOIS I.



CAPITAL. PORTE DORÉE.

FROM A DRAWING BY THE AUTHOR.

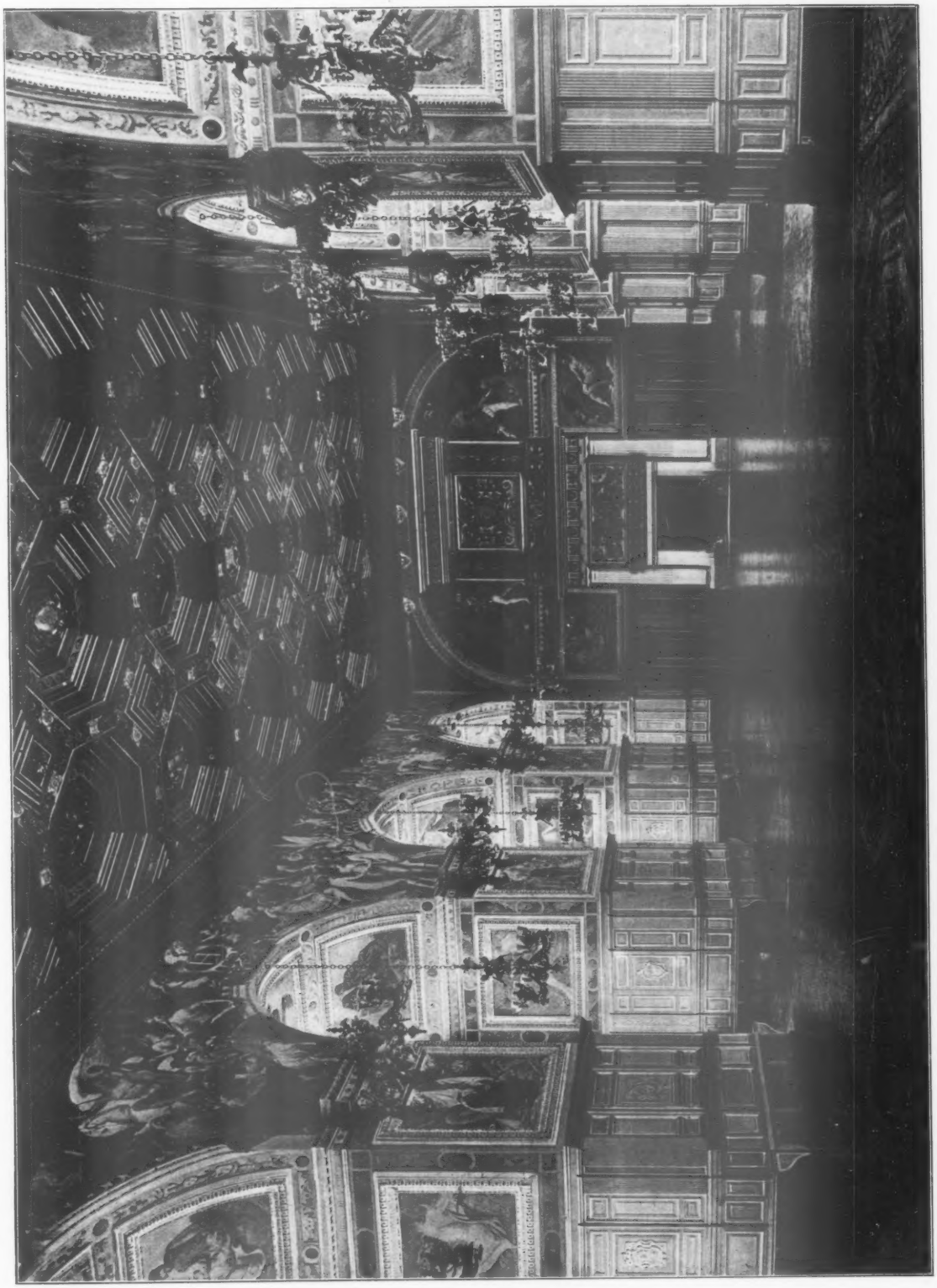
manship seems to me, for its purpose, unsurpassable. No finer example could be found of the limits and possibilities of stucco modelling, and of its use on a monumental scale; and when one compares an authentic example of Italian stucco, such as this, with the plaster work that one finds in England of the same date, the conclusion is pretty certain that the stories of travelling companies of Italian plasterers at work in England are nothing but fables. With the exception of the work at Nonesuch, of which we know only by repute, practically no sixteenth century stucco work was ever executed in England by a first-rate Italian stuccatore, and we have suffered in consequence. The Florentines started a tradition of plaster work in France that has lasted to this day, and such as we have never had in England. Vasari says that Luca Penni came to England, probably on the death of François I., when there was a general break-up of the Italian immigration of 1530-40; but I doubt if any trace of Penni's influence is to be found in England. According to Mr. Cust, I do not know on what authority, the Penni who came to England was not Luca, but Bartolommeo; but nothing is known of what he did in England. It is said that a certain "Luca Romano" came to England, and was at work in this country on stucco as late as 1586. I fancy that this "Luca Romano" was in fact Luca Penni, who was a Roman and engraved after Primaticcio, but is not known to have worked in stucco, and a comparison of the great frieze in Hardwicke Hall with the Italian work at Fontainebleau leaves little doubt that, whatever influence the Italians of Henry VIII. may have had at the time, it had disappeared by the middle of the sixteenth century. As a general scheme of decoration, the value of il Rosso's combination of stucco and painting is another question. To English taste, trained on simpler methods, it narrowly escapes vulgarity, and there is something almost nauseating in this astounding and uncontrolled exuberance of ornament. Yet the whole gallery has been so much scraped and cleaned and gilt and over-painted that a certain garishness of effect may be only the result of restorations, and had the work of il Rosso and his men been left to mellow with time, the impression of the whole might have justified itself.

M. Pfnohr gives a story that when Primaticcio succeeded il Rosso at Fontainebleau in 1541, he destroyed a great deal of the latter's work, and not daring to remove his painting in the gallery of François I., covered as much of it as he could with stucco ornament. That il Rosso and Primaticcio were rivals and at daggers drawn is probable; and Primaticcio, a highly successful adventurer, would not have been deterred by any scruples from wiping out his rival's work, especially as it was in a manner with which he was out of sympathy. Il Rosso was a Florentine, a great draughtsman rather than a colourist, and an artist who, like his master Michael Angelo, found his pleasure in the intellectual rather than in the sensuous side of art. Primaticcio was a pupil of Giulio Romano, himself a pupil of Raphael. Some of his charm he undoubtedly learnt from Correggio, and of all artists, in spite of Sir Joshua Reynolds' dictum, he seems to me to have been least under the influence of Michael Angelo. Judging by his own work it is probable that Primaticcio actually disliked il Rosso's manner, and it is certain that he was not the man to stand on ceremony in these matters. He succeeded in completely outwitting Cellini, and his treatment of the design of the Salles des Fêtes shows his disregard for other arts than his own. At the same time it is improbable that François would have allowed interference with the work of il Rosso, an artist for whom he had the highest regard; and in the second place, though differences of handiwork can be detected in the stucco work of the gallery, the modelling is everywhere superior to any stucco work by Primaticcio, and I could find no trace anywhere of Primaticcio's peculiar mannerisms—the long slender limbs and disproportionate height, and lastly the curious but very fascinating expression that one finds in Primaticcio's figures, as, for instance, on the Grand Escalier du Souverain at Fontainebleau, and in certain of his drawings at the Louvre. Unless there is documentary evidence to prove it, and it seems there is none, M. Pfnohr's story is not borne out by the facts. The story, however, represents a general position that one need not hesitate to accept. Primaticcio may not have scraped away il Rosso's pictures, but he completely superseded his influence in France. Il Rosso and his men were Florentines, Primaticcio was a Bolognese, and the artists with whom he surrounded himself, Fantuzzi, Caccianemici, Bagnacavallo, Serlio even, were all of Bologna. But this was not all. In Primaticcio's work one finds something more than the change from the school of Florence to that of Bologna. A new motive appears, of which various explanations are given. In the first place Primaticcio was trained in a very different school from that of il Rosso. He learned his art from Giulio Romano, himself the most distinguished pupil of Raphael, and worked with Romano in the Palazzo del Té at Mantua; and it is evident, though how is not exactly known, that he came a good deal under the influence of Correggio and Parmegiano. Indeed, M. Dimier maintains that to these sources only should be attributed the peculiar cast and colouring of Primaticcio's artistic temperament.

The derivation of genius is always an uncertain affair, and must depend quite as much on personal judgment and the study of handiwork as on the recorded facts of history. In the case of a designer of the finesse and subtlety of Primaticcio, it is peculiarly difficult. To my mind there seems to be an element in his work not to be accounted for by the influence of his early masters, a pyschological element difficult to define except by negatives. This element was something new, something not to be found in Italian work, the result I believe of the reaction of his French surroundings on Primaticcio himself, the influence of the French genius, asserting itself in a domain of art that it was at length beginning to master as its own.

When Primaticcio succeeded to the control of the King's work, twenty-five years had elapsed since the battle of Marignano, time enough for French artists to learn the newer Italian manner and to walk by themselves. Jean Goujon and Germain Pilon press close on the heels of Primaticcio, and Philibert Delorme was able to take up a position as architect such as had never been allowed to Serlio. Moreover, there was a personal element in Primaticcio himself that helped this emancipation. In his early days he showed great activity in his multifarious works, but he may be said to have "arrived" pretty early in life. He was only twenty-seven when he succeeded il Rosso at the Court of France, and his reputation was made before that date, for while il Rosso was engaged in the Galerie of François I., Primaticcio was employed to paint 58 frescoes, with stucco ornaments and borders, for the walls of the Gallery of Ulysses, with 80 medallions for the panels of its ceiling. The whole of this work was destroyed by Louis XV., and we have to take its merits on faith from Vasari, the Père Dan Algarotti, and other writers. M. Dimier, indeed, as the result of a great deal of research, claims a vast quantity of work for Primaticcio in all the arts, and gives very good reasons for many of his conclusions. But the actually proved number of works by this artist is not considerable. There remain a great many drawings scattered about which are attributed to him, the paintings of the Salle de Bal, the stucco of the Escalier du Souverain, and some rare pictures. Altogether there is not very much to show for a man who for thirty years and under four successive kings controlled the artistic work of one of the most sumptuous courts in Europe. The probability is that Primaticcio found it easier to direct and superintend others than to do the work himself. He was largely dependent on the work of his staff. By the middle of the sixteenth century he had become a very great personage at the French Court, and it would not consist with the dignity of an artist who was *valet de chambre* to the king, and Abbot of St. Martin of Troyes, to dangle his legs on a scaffolding, or potter about in a plasterer's blouse. It is probable that a very great deal was left to his men; and, as a matter of fact, the great decorative paintings of the Galerie de Henri II. were not executed by Primaticcio, but by Nicolo dell' Abbate, from his designs. The result of this delegation would be, and indeed was, that his staff had to be supplemented by French artists, as the Italians disappeared, and these men soon became capable of acting on their own initiative. As in England, the Italian influence gradually waned, and native artists were established in the full mastery of their art before Primaticcio died in 1570; in other words, the French, as usual in the arts, anticipated the English by at least fifty years.

That Primaticcio was an artist of fine quality is proved by the examples I have mentioned, and not least of all by certain beautiful drawings of his in the Louvre and elsewhere; but he gives the impression of having degenerated into an astute and not too scrupulous *entrepreneur*. He had the knack of finding out the right men for his purpose. He came across da Vignola at Rome, and employed him to help with his casts from the antique both in Rome and at Fontainebleau. But Vignola was too unaccommodating and too fond of his country to stay in France, and was succeeded by Serlio. The curious thing is that, though Serlio was appointed architect of the king's buildings at Fontainebleau, all the evidence tends to show that he did little at the palace. M. Dimier gives reasons for believing that he did not design the Salle des Fêtes, and it is known that he had no voice in the decision to substitute a flat ceiling for the vaulting designed for that room. Serlio says that a "man of superior authority" ordered the building to be altered, and that he himself was never consulted in the matter. The question is, who was the "man in authority." M. Dimier says it was Philibert Delorme, but it seems to me that it was much more probably Primaticcio himself, and his treatment of the architecture of the Salle de Bal appears to me a signal instance of that disregard of architecture habitual in the ordinary painter. Sculptors who deal in the round realise that an architect must have his planes, his light and shade, and the relief of actual forms, if he is to get his effect; but the painter, who works on the flat, seems often to think this unnecessary, and that he himself can do all that is wanted with his paints, and his brushes, and his chiaroscuro; if architecture gets in the way it must get out of it, being merely a vehicle for painting. This, at least, was Primaticcio's view, and he acted upon it with unhesitating resolution.



GALERIE DE HENRI II., ALSO KNOWN AS SALLE DE BAL AND SALLE DES FÊTES.

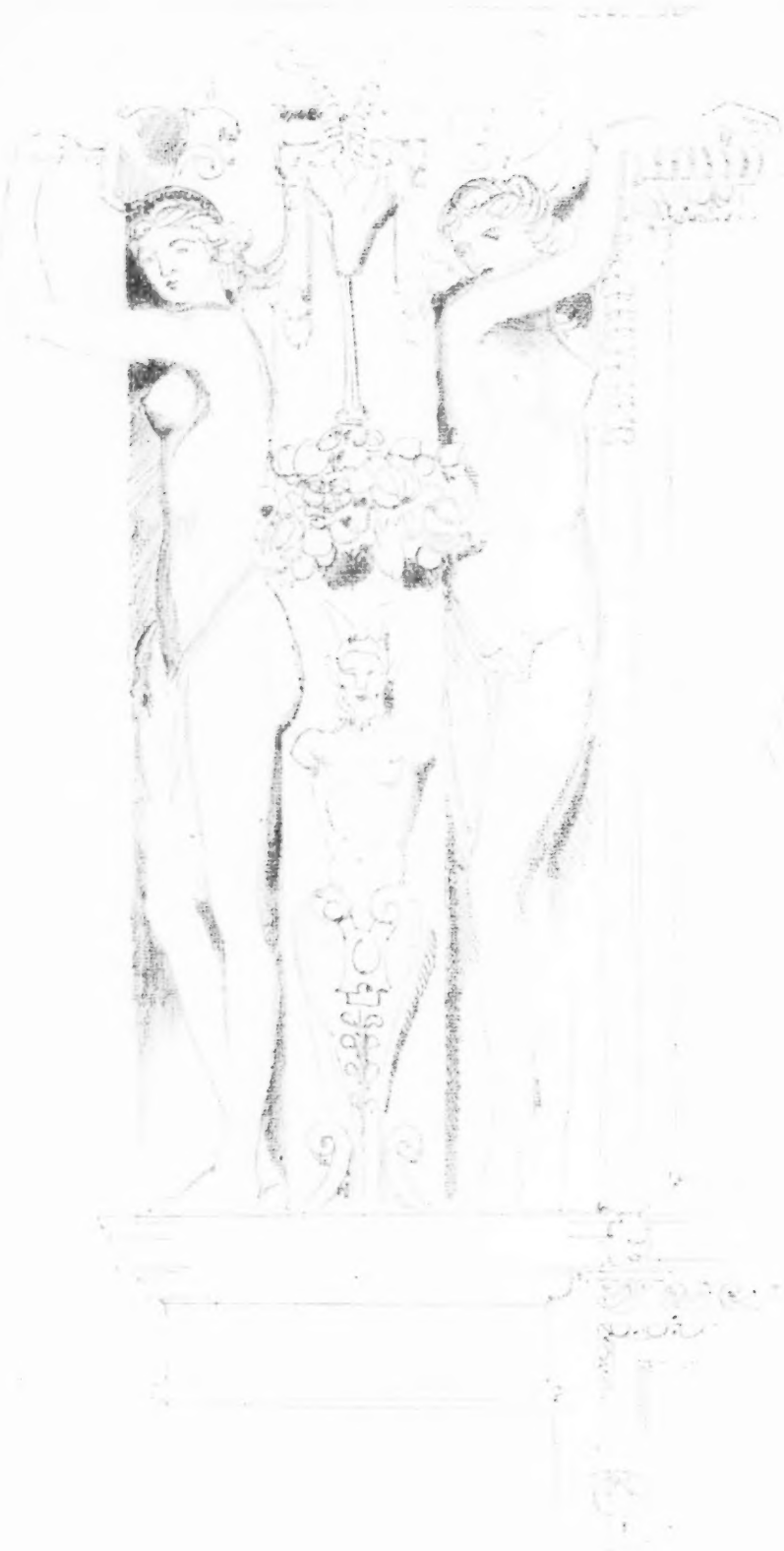
CHIMNEY-PIECE IN THE GALERIE DE HENRI II.

It is probable that he was already well established at Fontainebleau when the Salle de Bal was begun, somewhere between 1530 and 1540. The exact date appears to be very uncertain, and it is supposed that the hall occupies the site of a gallery included in Francois' scheme of 1528. It certainly does not belong to the earlier Italian work at Fontainebleau, and its design was a con-

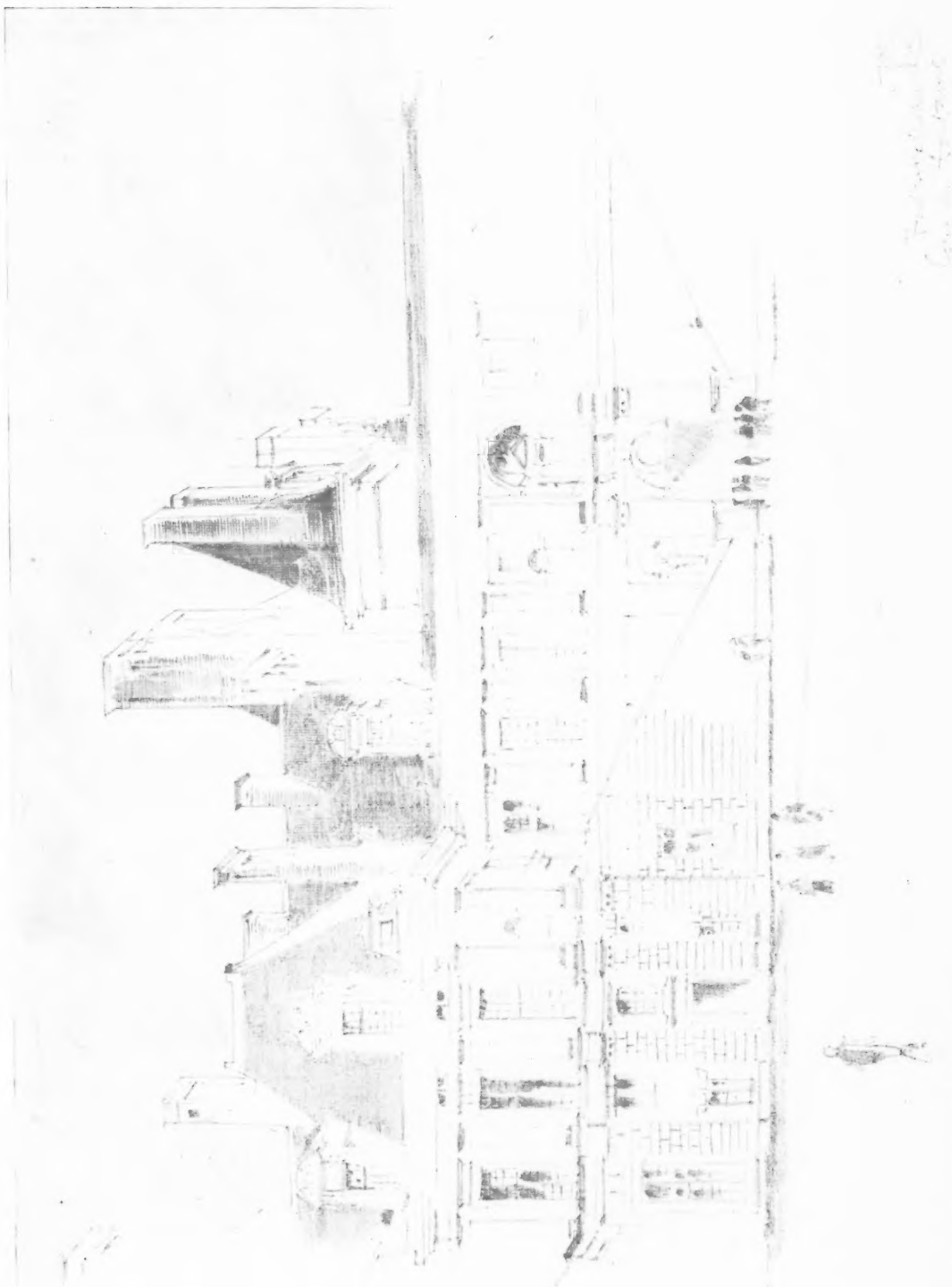
ception beyond the range of Le Breton, the master-mason of the palace. On the other hand, mediæval gargoyles spring from the cornice outside, and we must suppose that the building grew in the usual promiscuous way, designed perhaps by an architect proper, built by French masons, and carved by Italians. The traditional story is that Serlio was the architect of the building, and that Primaticcio made him give up his vaulting for a flat ceiling. M. Dimier says that not Serlio but the master-mason Le Breton was the architect, and that the "man in authority" who ordered the alteration without consulting Serlio was in fact Philibert Delorme. But Philibert Delorme had the profoundest contempt for painter-architects; he was an architect or nothing, and the last man in the world to sacrifice architecture to painting. Moreover M. Dimier's dates are loose. The building was up to the springing of the vaulting when the incident occurred, and it occurred before the death of François I. Serlio says that it happened when he still held office as architect to François, and as Delorme did not succeed him till 1548, and could have had no authority to interfere till formally appointed, it seems to me that M. Dimier's hypothesis and valiant attempt to whitewash his hero must fall to the ground, and that it was in fact Primaticcio who forced the architect of the Salle de Bal to stultify his design, for the vaulted bays at the sides have no meaning without the central vault. In 1541, as we have seen, Primaticcio succeeded to the supreme control at Fontainebleau, and had to prepare the scheme of decoration for the Salle. He found, on examining the plans, that the architect proposed to build the Salle as a large vaulted central nave, with five embrasures or bays on either side, separated by very massive piers to receive the thrust of the vaulting. The central nave measures 29m.40 in length, and 9·62 in width, exclusive of the bays which measure 2m.65 in depth, by 3·80 in width. The ground storey was already built on this plan, and the first floor (the floor of the Salle des Fêtes), with the arches to the side bays, and the corbels to receive the groining of the central nave, were already up when Primaticcio entered on the scene. He at once saw that, if the architect's plan was carried out, there might be a very fine hall, but there would be no room for his paintings, except the two end walls and the side bays. This did not suit the master decorator at all. It was a simple matter to sacrifice the mere architect, and he was compelled to abandon the vaulting to the central nave, and to carry his walls straight up to a flat coffered ceiling instead. Either through carelessness on the part of Primaticcio, or as a last struggle made by the humiliated architect, the corbels were allowed to remain. What the architect thought of all this, we do not know. Serlio, if he it was, merely states that a man of superior authority and better judgment than the mason ordered the alteration, and that not the slightest reference was made to him in the matter, though he was on the spot and in the king's service. Primaticcio was all-powerful, and probably Serlio dared not allow himself to say more. In 1548, he was superseded by Philibert Delorme, and he left Fontainebleau for Lyons in 1550.

Primaticcio had now got his wall space, and his designs were carried out by Niccolo dell' Abate, who covered every available space above the panelling with allegorical and classical subjects, such as Ceres and the Harvest, the Forge of Vulcan, the Palace of the Sun, the Marriage of Thetis and Peleus, the Judgment of Paris, Jupiter and Mercury entertained by Philemon and Baucis, and the like; and it must be admitted that, if Primaticcio ruined a great architectural design, he designed a very fine piece of decoration. There is some uncertainty and hesitation in the scale. The artist seems never to have made up his mind whether his figures were to be heroic, or life size; moreover, having cut away all architectural details, he seems to have thought it necessary to paint some of them in again, so he painted architraves to the arches on the flat wall-surface, and then painted over them the shadows of the wheatsheaves, or of any stray legs and arms of gods and goddesses that happened to be near. Apart from this there is a certain frivolous charm about the figures which is very attractive, and a glow of colour, in spite of M. Alaux's restorations, which is entirely wanting in il Rosso's work. One does not wonder at the ascendancy which Primaticcio gained over the French Court of the sixteenth century with its passion for amusement and intrigue.

Primaticcio's stucco work on the Escalier du Souverain is in some ways the most interesting thing at Fontainebleau. This staircase was originally the bedroom of the Duchesse d'Étampes, a warm supporter of Primaticcio; and it was from this room that she escaped when Henri II. succeeded to the throne and Diane de Poitiers to the royal favour. It is probable that Primaticcio designed and executed this work himself; all that is left of it are the female figures supporting framed panels and cartouches with oval centre-pieces covered with amorini over the doorways. The figures were originally nude, but Maria Leczinska, wife of Louis XV., of all people in the world, thought it necessary to cover them partially with drapery. Notwithstanding this, they are beautiful figures, characteristic of Primaticcio's work, but significant in their high relief,



FIGURES ON THE WALLS OF THE ESCALIER DU SOUVERAIN
(FORMERLY THE BEDROOM OF THE DUCHESSE D'ÉTAMPES).



COUR DES FONTAINES.

CAPITAL IN THE COUR OVALE.

CAPITAL FROM APSE OF CHAPEL OF S. SATURNIN.

APSE OF THE CHAPEL OF S. SATURNIN.

almost standing free from the wall, of the decadence of architectural sculpture. Primaticcio was indeed an indefatigable man. He had easily outmanœuvred his countrymen in preserving his position at Court. It is true that in Philibert Delorme he met a strong, unyielding man, an architect who believed in architecture, and who for some ten or eleven years must have been a thorn in the side of the painter, with his exact and uncomfortable knowledge of facts. But Primaticcio's methods were successful as before, and two days after the death of Henri Delorme was dismissed, and Primaticcio was appointed "Surintendant des Bâtiments." M. Dimier attributes to Primaticcio, among other works at Fontainebleau, the east side of the Cour de la Fontaine, with the double external staircase known as the "Aile de la Belle Cheminée. This is the best piece of architecture in the whole building, and if indeed it was designed by Primaticcio, it would prove that he shared some of the genius of Peruzzi for severe and masterly architecture; but Primaticcio's authorship rests on the scanty evidence of the word "neuf," which M. Dimier interprets to mean two years before 1570, but which might also apply to buildings erected before 1550, which would bring in Philibert Delorme and even Serlio. Delorme's work at Fontainebleau is more or less known. He built the famous "Fer à cheval" staircase * on the side to the "Cour du Cheval Blanc," a masterpiece of constructive ingenuity, of which the architect was very proud himself; but it is a bad design, and the detail is crowded and fussy. It is improbable that the architect of this staircase should at the same time have designed the broad, majestic façade of the double staircase. The master-mason is out of court, and it seems to me that none but a trained Italian architect would have been capable of such a design, and that it is very probable that this façade was Serlio's contribution to the Palace of Fontainebleau. Félibien, ("Entretiens," 2, 57), states that this was, in fact, designed by Serlio. It is a fine piece of spacious design, and one finds here, for the first time, the wide, flat Doric pilaster, which remains to this day the most characteristic feature of modern French Classic. Where I think Primaticcio's hand can be traced is in the very unusual and imaginative sculpture of the capitals in the Cour Ovale. These vary very much in quality, those added in the time of Henry IV. being little above the level of our own Jacobean, but on the capitals of the pilasters of the Salle de Bal a master was at work, inspired by some very able designer. Here are satyrs and wild men of the woods, devils, amorini, goats, stags, and other strange devices for volutes; and even bolder are the capitals to the buttresses of the Chapel of St. Saturnin, where stags' heads form the volutes, entangled with devices of the F. and the salamander of François I., and, by some curious play of fancy, the head of the stag which forms the volute on the engaged side just reappears through the surface of the stone. Few details in this great palace suggest more intimately the strange, romantic, utterly unreal, and yet intensely fascinating atmosphere of the court of François I.

Here I must close these casual notes on Fontainebleau, with an apology to the reader for their inconsequence. But rambles through the palace are like hours in a well-filled library, and, indeed, the building is a very mine of wealth to the student of modern French art. I have put down some of the traces of Italian influence, but the story can be followed steadily onward in all its varying phases down to the present day; and though the palace has suffered from the painter, gilder, and carver, it has somehow escaped the ravages of modern Gothic, and gives the impression of having maintained its continuity of existence in spite of all. Every corner of it has some historical association of absorbing interest, for it was the favourite residence of the French kings. In the ante-chamber of the Cabinet du Roi Marshal Biron was arrested for treason against the throne of Henri IV. In the Galerie des Cerfs, Monaldeschi was butchered by command of Christina of Sweden. In the Cabinet de Travail du Roi, Napoleon signed his abdication; in the Cour du Cheval Blanc he parted from his generals. To the north of the palace is the Jardin de Diane, to recall the memories of Diane de Poitiers and her successors; to the south are the great gardens laid out by Lenôtre for Louis XIV., the Causeway with its avenue of whispering limes, and the lake with its legend of immemorial carp; and over all rests an ancient peace. The French Revolution seems to have passed by Fontainebleau, leaving it, by some happy chance, a monument of the Old Régime. The vices and failures of that forgotten period are buried by time; only its finer qualities are here suggested, in the noble spaciousness of the grounds and the tranquil dignity that still lingers round the palace. It is a standing lesson of what the Arts have lost in the rush of modern life. What function is reserved in the future for art it is difficult to say; what is certain is that the modern temperament renders it almost impossible to attain to the qualities of breadth and simple inevitable power, which were as much a matter of course with these masters of the past as their perfect manner was with the older aristocracy of France.

REGINALD BLOMFIELD.

* This staircase was rebuilt in its present form under Louis XIII.

The Garden City.

WRITERS in the daily press, in occasional bursts of Chauvinism, call attention to the fact that England's capital, already many times bigger than any continental city, is growing daily larger, and invite us to see in this expansion proof that we are the darling children of Providence! To anyone whose senses are not blunted by custom, this growth, so far from being a matter of congratulation, is a haunting nightmare. What is this expansion which we are invited to admire but a frowsy fringe of mean houses swallowing up orchards and gardens, and making a waste more dreary than a desert?

Sixty years ago Cobbett called London a "wen"—Lord Rosebery, in 1891, describes it in more emphatic language as "a tumour—an elephantiasis sucking into its gorged system half the life, and the blood and the bone of the rural districts."

Vast re-housing schemes are set on foot to relieve the congestion by shifting the population from the centre, but still the evil grows; ring upon ring is added to the already overgrown mass, the town gets bigger and bigger, and the country is pushed farther and farther away. Time has proved that merely shifting people to the circumference only intensifies the difficulty so long as they are employed at the centre.

Schemes, too, for wooing the people back to the country have not been lacking, but they have mostly been of the "village club" order. The most serious contribution towards the solution of the problem has been the granting of allotments, but neither the mild allurements of the club nor the more solid advantage of the allotment ground have proved sufficient; the depletion of the country still goes on, and the farmer is left almost singlehanded to wage his eternal warfare with nature. As a small set-off to this constant influx into the town, employers of labour are slowly beginning to realise the advantage of moving their works out of London; but the movement has been sporadic, and may be said to have had little or no effeet in checking its abnormal growth.

To Mr. Ebenezer Howard we are indebted for the conception of a scheme combining the attractions of town and country, and in "Garden Cities of To-morrow"* he shows how the tendency of country people to flock into towns, and of manufacturers to move into the country, may be directed into mutually beneficial channels. His aim is to realise Ruskin's ideal city, whose houses are built "strongly, beautifully, and in groups of limited extent, walled round, so that there may be no festering and wretched suburbs anywhere, but clean and busy streets within and the open country without, with a belt of beautiful garden and orchard round the walls, so that from any part of the city perfectly fresh air and grass and sight of far horizon might be reachable in a few minutes walk."

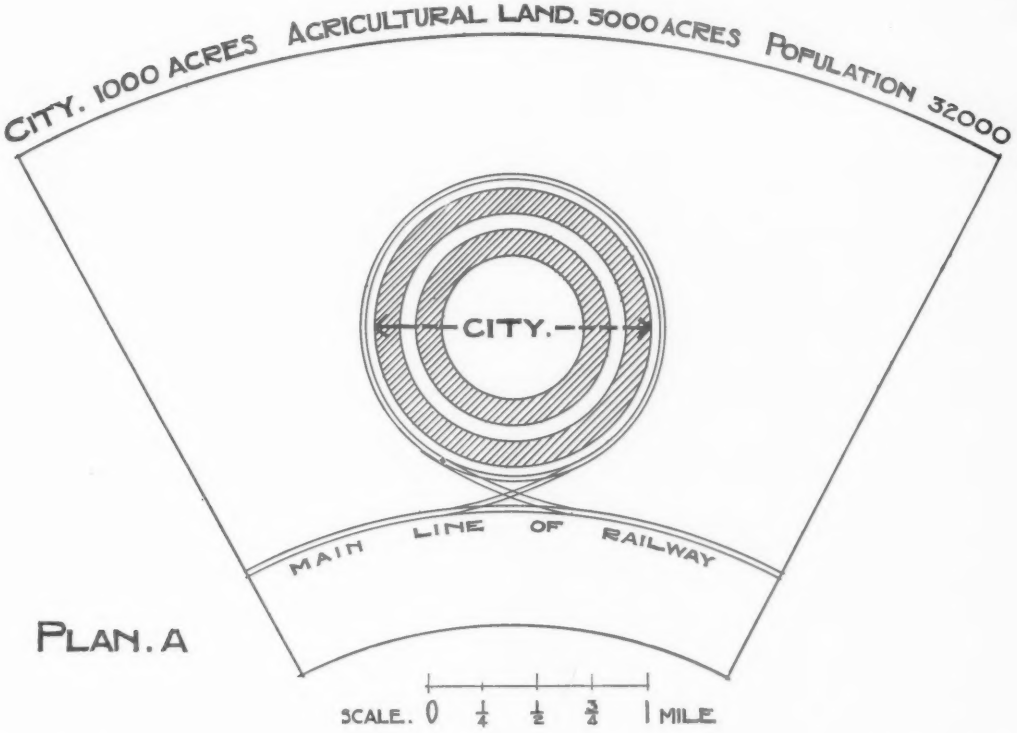
The direct reform of large cities is abandoned as being impracticable, but, indirectly, a great change is foreshadowed, and even their automatic conversion into "Garden Cities." The realisation of this aim involves no heroic measures of confiscation, no great scheme of national socialism, but is brought about in an ordinary way, and by means with which we are all familiar. The only new force imported is the free exercise of natural common sense, a quality which has almost atrophied from long disuse. Every element is ready to the hand of the reformer, but all is chaotic and unorganised.

This is not the place to do more than touch lightly on the financial side of the proposal, but the scheme cannot be made clear if it is entirely passed over.

Capital is raised to buy agricultural land. This land is vested at first in trustees. Subject to certain restrictions, building sites are let in the ordinary way, and the ground rent provides the interest and a sinking fund to repay the capital within a stated time. So far this is the usual way in which all building estates are "developed," but the Garden City scheme differs in this respect, that by the time the town takes shape and becomes populated the capital has been paid off, the inhabitants have elected their council or municipality, the trustees disappear and the municipality has automatically become the owner of the whole estate. The city is its own ground landlord, and the ground rents are paid to the municipality and applied in the same way as rates would be for municipal purposes. It will thus be clearly seen that a substantial income can be raised for the sole benefit of the town, the lessee possibly paying but little more for rent and rates combined than he now pays for rent only. There are, of course, many minor details of finance, but the main point is that the town is self-supporting, and that in a sense everyone is a freeholder.

A glance at Plan A shows that in the centre of the estate a definite area, which may not be enlarged, is allotted to the city; farms and gardens surround it.

* Swan, Sonnenschein and Co. 1s. nett.

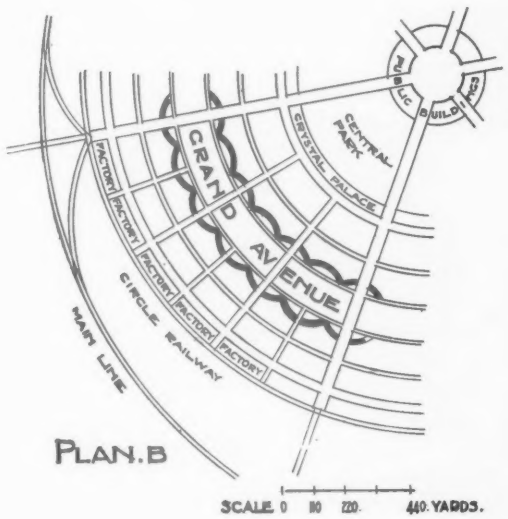


PLAN. A

Plan B shows more or less in detail one "ward" of the city, which is thus described by the author:—*

"Six magnificent boulevards, each 120 feet wide, traverse the city from centre to circumference, dividing it into six equal parts or wards. In the centre is a circular space laid out as a garden, and surrounding this garden, each standing in its own ample grounds, are the larger public buildings. The rest of the large space encircled by the 'Crystal Palace' is a public park, containing 145 acres, which includes ample recreation grounds within very easy access of all the people. Walking still towards the outskirts of the town, we come upon 'Grand Avenue.' This avenue is fully entitled to the name it bears, for it is 420 feet wide, and forming a belt of green upwards of three miles long, divides that part of the town which lies outside Central Park into two belts. It really constitutes an additional park of 115 acres; a park which is within 240 yards of the furthest removed inhabitant. In this splendid avenue six sites, each of four acres, are occupied by public schools and their surrounding playgrounds and gardens. On the outer ring of the town are factories, warehouses, etc., all fronting on the circle railway, which encompasses the whole town, and which has sidings connecting it with a main line of railway which passes through the estate.

"While the town proper, with its population engaged in various trades, callings, and professions offers the most natural market to the people engaged on the agricultural estate; yet the farmers and others are not by any means limited to the town as their only market, but have the fullest right to dispose of their produce to whomsoever they please. This principle of freedom holds good with regard to manufacturers and others who have established themselves in the town. These manage their affairs in their own way, subject, of course, to the general law of the land, and subject to the provision of sufficient space for workmen

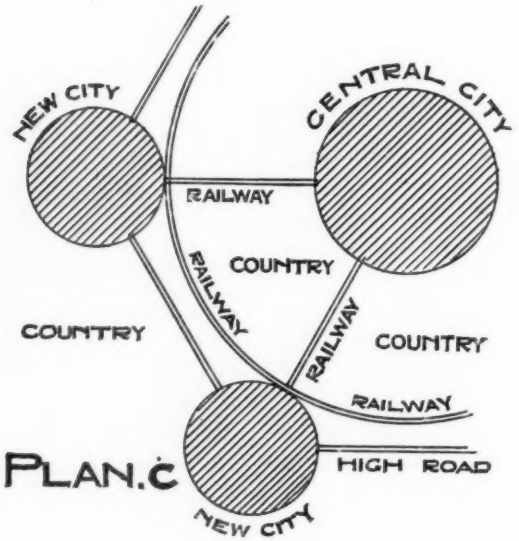


PLAN. B

* The author's descriptions are compressed although given in his own words.

and reasonable sanitary conditions. Even in regard to such matters as water, lighting, and telephonic communication—which a municipality, if efficient and honest, is certainly the best and most natural body to supply—no rigid or absolute monopoly is sought; and if any private corporation or any body of individuals proved itself capable of supplying on more advantageous terms, either the whole town or a section of it, this would be allowed. The area of municipal and corporate action is probably destined to become greatly enlarged; but, if it is to be so, it will be because the people possess faith in such action, and that faith can best be shown by a wide extension of the area of freedom."

Plan C shows the method of expansion when the original city no longer suffices. "How shall it grow? Shall it build on the zone of agricultural land which is around it, and thus for ever destroy



PLAN C

its right to be called a 'Garden City'? Surely not. Consider for a moment the case of a city in Australia. The city of Adelaide is surrounded by its 'Park Lands.' It grows by leaping over the 'Park Lands' and establishing North Adelaide. And this is the principle which it is intended to follow, but improve upon, in the Garden City. And this principle of growth—this principle of always preserving a belt of country round our cities—would be ever kept in mind till, in the course of time, we should have a cluster of cities, not, of course, arranged in the precise geometrical form of my diagram, but so grouped around a central city that each inhabitant of the whole group, though in one sense living in a town of small size, would enjoy all the advantages of a city, and yet all the fresh delights of the country; field, hedgerow, and woodland—not prim parks and gardens merely—would be within a very few minutes walk."

For the benefit of those who see in the scheme the germs of an insidious Socialism or Communism, Mr. Howard writes: "Communism is a most excellent principle, for we all believe in communistic roads, communistic parks, and communistic libraries. But though Communism is an excellent principle, Individualism is no less excellent. Isolated and individual thought and action are essential if the best results of combination are to be secured, as combination and co-operation are essential, if the best results of isolated effort are to be gained; and that society will prove the most healthy and vigorous where the freest and fullest opportunities are afforded alike for individual and for combined effort. Nor is the scheme to be regarded as a socialistic experiment. Socialists advocate common property in land and in all the instruments of production, distribution, and exchange. In Garden City no such monopoly is claimed; by far the larger part of the work done will be by individuals or combinations of individuals quite other than municipal servants. My proposal appeals not only to individuals but to co-operators, manufacturers, and others with organisations under their control, to come and place themselves under conditions involving no new restraints, but rather securing wider freedom."

To plan and build a new city which is to be free from the defects of existing ones is no light task; and that the first Garden City will entirely realise the dreams of its author is not perhaps to be expected. Mr. Howard's scheme is, however, pre-eminent amongst the many that have been projected, in that he alone seems to have grasped the conditions of the problem, and understood how to turn natural forces into reasonable channels. The experiment being an entirely new one, untrammelled, and at the same time unguided by tradition or precedent, some criticisms of the project from the architect's point of view may not be out of place.

The circular form proposed for the city is an innovation on the hitherto accepted methods. It is true that most cities have grown up more or less by haphazard, but there is an underlying reason for the square alignment which is practically universal. The natural form of a building is rectangular, and the buildings have shaped the streets on which they abut. Miles of curved streets would probably be monotonous, and would certainly be difficult to treat architecturally. Walking on the inner side of a curve produces the feeling that buildings, as they gradually emerge within the range of vision, are being pushed out one by one to meet the eye, while the outer side

stretches an encircling arm perpetually cutting off all view, and giving the sense of being buried in houses which are always in motion; the sites, especially near the centre, become fan shaped and would not be easy to build on.

The cities of the Old World are approximately rectangular, polygonal, or shapeless in outline, but are almost invariably forced more or less into rectangular forms within. Those of the New World are uncompromisingly rectangular.

Paris, Vienna, Moscow, Amsterdam, are polygonal; Brussels pentagonal; but with the exception of Amsterdam very little trace of the outline appears in the internal arrangement. Amsterdam on one side continues the form of the outline almost to the centre, and has radiating streets.

A polygonal form is free from most of the difficulties of a circular plan. The radiating streets might run at right angles to the faces of the figure. The general intention of the "Garden City" arrangement would thus be preserved, but the buildings could be rectangular and amenable to the most varied treatment.

The radius of the "Quadrant" end of Regent Street, from which we can judge the circular effect, is about 600 to 700 feet, while that of the "Grand Avenue" in the "Garden City" is about 3,000. This modifies, but does not remove the difficulties. A half suspicion, too, crosses the mind that "Garden City" (presumably about the size of Cambridge) is laid out on rather too sumptuous lines, and with some lack of scale and relative proportions. Applying the area roughly to London with Charing Cross as the centre, the north boundary comes somewhere near the British Museum; Buckingham Palace forms the west boundary; the Houses of Parliament, the south; the Law Courts and Waterloo Station, the east and south-east. This conveys some idea of the area, and would give ground for the fear that "Grand Avenue" may be somewhat too wide for its setting, and with the parks and gardens would be difficult to keep in a really efficient condition. It is conceivable that the City may be a little overweighted by its magnificence, and that while adhering generally to the system of laying out that is proposed, a rather more homely scheme would have a better chance of immediate success.

The "Crystal Palace" would probably be the first thing ruled out. The experience of Regent Street was not encouraging. The cost of repairing and cleaning an arcade of such stupendous proportions would go a long way towards swallowing up the whole of the municipal revenue. The idea of the covered way is quite sound, but arcades more on the lines of the Chester "Rows," or of the arcaded streets of some of the Italian towns, or even a modest edition of the Rue de Rivoli in Paris, with small glazed arcades at intervals if thought desirable, would answer the purpose, and would call for no municipal outlay in repairs.

It is clear that to ensure a successful result, all the buildings must be under a firm but not too rigid or rule-bound control. There is no reason at all why factories, for instance, should be the dreary erections that they now are; that they should rise to a high level of architectural beauty is not to be expected, nor indeed would it be natural or consistent if they did, but they can at least have the beauty of complete fitness for their purpose, the raw point of contact between the factory buildings and the country beyond can be softened by trees, and they may be set in tidy surroundings; their owners, too, without doing great violence to individual liberty, may be required to remove the unsightly débris, the rusting boilers, broken packing-cases, and the many unnecessary pieces of wreckage that are now the usual accompaniments of the factory hinterland. This idea of fitness and tidiness should also be the keynote of the streets and houses. It is to be a modern city, built under modern conditions, and its possibilities and limitations should be frankly accepted. Let there be no supposed imitation of the picturesqueness of the mediæval town, nor on the other hand any attempt to make of it a "model village." Build the houses exactly to answer their purpose, simply, amply, and well, with no unmeaning or redundant "ornament," and they will have the beauty proper to their place and time. Above all things the rows of "shabby-smart" little over-windowed houses with which the outskirts of London have made us familiar should never find a place. A walk through some of our nearer suburbs will convince anyone with eyes that there is nothing necessarily disagreeable in rows and streets of houses, so long as the houses themselves are pleasant and reasonable. In these suburbs the old and the new can be seen in violent contrast, and the smarting eyes turn with relief from the glare of the new streets, to the restful calm of the old. Quiet and ordinary as they are, they have, for that very reason, a fitness and even dignity of their own which puts to shame the impertinent and garish vulgarity of their unwelcome neighbours.

Every possible contrivance to discourage the use of smoke-giving fuel will no doubt be considered, and until such time as science shall wrest from Nature another of her closely-guarded secrets, gas and electricity must do much that is now done by coal. Gasworks and generating stations will therefore be necessary. These would presumably be placed in a position on the estate as remote as access to the railway would allow,

as under no circumstances should a high factory chimney be suffered within the city.

The question of farms for the disposal of sewage is just touched on in Mr. Howard's book, but it is doubtful if the sewage farm can be looked upon as anything but waste area, more or less offensive to the senses, and capable of growing little but rank grass and lanky cabbages. It would seem an excellent opportunity of applying a carefully-devised sanitary system on the lines advocated by Dr. Poore in "Rural Hygiene."

It would probably be difficult to modify the proposed method of land tenure to any great extent, but the fact should not be lost sight of that the ordinary 99 years' lease is a too short and uncertain term to tempt people to build sound, solid, and permanent houses, such houses, in fact, as should be characteristic of "Garden City." Some method of quasi freeholds or very long leaseholds may perhaps be devised which would remove this difficulty without robbing the municipality of a proper proportion of "rate-rent."

The idea is now passing out of the paper stage, and its promoters are showing their faith in its soundness by getting together the capital to make, at any rate, a beginning. It is a scheme of the greatest interest and probably of far-reaching importance, and one which, as Mr. Howard says at the conclusion of his book, "may well unite a vast army of workers to utilise that power, the present waste of which is the source of half our poverty, disease, and suffering."

ERNEST NEWTON.

Vauxhall Bridge.

IT seems to be almost a hopeless task to convince the average modern man in the street—at least the English street—that a great bridge is a monument of high architectural import. To such an extent has the architectural instinct of the nation degenerated in these matters since the days of Rennie, that when nearly half a million, a considerably larger outlay than that upon the late Queen's Memorial, is to be expended upon such a structure in full view of the Houses of Parliament, the æsthetics of the question are considered to be satisfied if an engineer, or, more probably, his clerk, devoid of any training whatever in the art of architecture, is turned on to draw some pseudo-Gothic panels (such as the jerry builder might do on a suburban villa) and dispense them over his granite piers and the cast iron "ornamental facings" of his arches.

The Bridges Committee of the London County Council consist of eighteen gentlemen—we may assume—of known probity and good sense in the ordinary affairs of life. Upon no other supposition than that of absolute blindness to the artistic demands of a great city can we fathom their recommendation of such a design for Vauxhall Bridge as "the most satisfactory." In antithesis we may quote the deliberate and more reliable statement of the President and Council of the Royal Institute of British Architects from their pungent petition:—"If a scheme of the pseudo-Gothic type illustrated should become a reality it would remain a discredit to the art of the century, to the London County Council, and to all connected with its inception." It is really difficult to refer to this kind of thing in temperate language.

The genesis of the new Vauxhall Bridge may be briefly described:—

Some five years ago a design with some granite "fonts" for piers and "ornamental" castings for arches was prepared under the direction of Mr. (now Sir A.) Binnie, the then engineer to the London County Council. This was inadvertently, but fortunately, illustrated by an enterprising London "daily," and in consequence a deputation from the Royal Institute of British Architects waited upon the Bridges Committee to press the artistic necessities of the case, which in brief consisted—and still consist—of a simple and dignified stone bridge of good architectural quality. If, however, steel arches were insisted upon the following points were urged:—

1. The lines of the steel construction should be frankly shown—not masked by "ornamental facings."

2. Cast metal mouldings should not carry along stone ones.

In other words, the piers being of stone, horizontally bedded, should be designed so that their lines are not architecturally continuous with the raking lines of the metal parapet.

3. The piers should be wide enough in elevation to satisfy the eye.

The importance of this last point is now apparent when doubt is thrown upon the adequacy of the new foundations provided.

These principles were illustrated by a design, offered gratis, which the London County Council might have done well to adopt. This design was fettered by some of the conditions laid down by the engineer, which were, nevertheless departed

from in no other particular than a widening of the piers as above called for.

In this design the chief architectural features were obtained by erecting weather shelters, found so useful on old Vauxhall Bridge, over each pier, by the avoidance of projecting members injurious to craft, and the omission of all cornices and mouldings on the piers, which would connect with the metal work. A happy and interesting feature consisted in the re-instatement, in somewhat improved form, of the effective iron parapet from the old bridge. The footway was also cleverly bracketted out to give greater prominence to the piers.

However, the engineer would have none of the architects' suggestions, and apparently travelled on the Continent to study continental methods for himself—always excepting the all-important one which spells continental success—the association in countries other than our own of an architect of parts with the engineer in these important works of architecture.

In the result, a bridge of concrete arches faced with granite, carried by granite piers, was produced to the general surprise. It appears that the construction was copied from a bridge at Geneva, while one of the most intrusive ornamental features, granite columns rising from each pier to carry lamp brackets (rather suggestive of the same engineer's "ornamental" drain-pipe ventilators on Chelsea Embankment and elsewhere), was derived from a German example where such ornaments have a wholly different function and significance.

Had the piers been wide enough the lines of this bridge would have been undoubtedly graceful and pleasing.

The detail was fussy in quantity, and in quality showed a complete absence of architectural mastery or merit.* The gravest defect was in the arch voussoirs, which were obviously too slight for the work they were supposed to be doing. This radical defect, coupled with the slightness of the piers, deprived the whole design of that quiet dignity demanded by such a structure.

The Royal Institute of British Architects again stepped forward to urge amendments, but the engineer was too pleased with his fledgling with weak legs and wings to accept suggestions, and carried his Bridges Committee with him by the aid of an elaborate model and a highly coloured perspective. The single amelioration towards greater dignity secured by the architects was the omission of parti-coloured granites.

Thus the work was ordered, and the contract for the removal of the old bridge and the foundations of the new one was let. But further surprises were in store.

The stability of the concrete structure had, since its inception, aroused comment and doubt. The architects had not questioned or had an opportunity of examining the engineer's calculations. They had only called attention to the lack of apparent stability.

The old order changeth. To Sir A. Binnie succeeds Mr. Fitzmaurice, and before long it is whispered that the doubts are justified, that the foundations provided are insufficient, and that the engineer's calculations have not erred on the side of security; in fact, that the margin of safety allowed for, however sufficient for the lighter continental requirements, is inadequate for London needs. The Department must get rid of the novelty at all costs—but apparently on other grounds, for courage seems lacking to face the facts. An ill-navigated tug-boat is made the scapegoat. The Vauxhall Bridge Act requires a clear waterway, during construction, of seventy feet over three arches, with a clear headway of fifteen feet over two of them, and eighteen feet over the other. It is ambiguous whether the headway is to be clear at one point or over the whole waterway of each arch. This ambiguity was in the first instance so far taken into consideration that it was proposed to acquire further Parliamentary powers to put matters on a firm basis, but a clever plan of Sir A. Binnie's for the centreing, set doubt at rest, and secured the sanction of the Thames Conservancy to a headroom of fifteen feet and eighteen feet in the respective centres only of each opening.

The colliding tug-boat as defendant subsequently won an action brought by the bridge contractor, not on the ground that the clear headway had been interfered with, but on the clear issue that the seventy feet clear waterway had not been preserved, and Sir A. Binnie's bridge is now stated to be abandoned lest the execution of his plan for the centreing, as formerly sanctioned by the Conservancy, should render the London County Council possibly liable to "legal negligence" on the indefinite question of possible headway, should it ever possibly be raised.

It is a fine example of British bungling, which reflects no little discredit upon the part of the engineering department, even if it is used as a cloak to shield other reasons for abandonment. The plain man asks why not now secure the Parliamentary powers originally contemplated? Dr. Longstaff elicited, however, by questions in open council, that the foundations were not what they ought to be, and that Mr. Fitzmaurice was not so favourable to concrete construction as his predecessor, in the face of which curiosity seems

* For illustration see the "Builder" of Jan. 7, 1899.

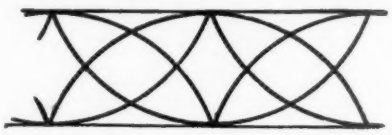
not misplaced as to what would have happened if Sir A. Binnie had remained at the helm.

Incidentally, in the Bridges Committee's Report, doubt is only thrown upon the foundations as one reason for not erecting a *steel bridge faced with granite!* The engineers, it seems, are not even in the swaddling clothes of architectural propriety and fitness. There is no shred of courage shown to use steel as steel honestly, the only way it can be used effectively, but the Report finally brings us up dead with the "ornamentally-faced" ineptitude which lately hung in the London County Council's council chamber, and, as though other grounds were insufficient, the London County Council is urged by this precious document of the Bridges Committee to accept it, because, by doing so, the tramway systems will be linked up across the river so much the sooner! How much more urgent and important than a dignified respect to Father Thames!

For those who have not seen it, a brief description of the threatened artistic calamity must be given.

The granite piers seem too slight to do their apparent work. The cutwater, ending just above high-water level, leaves a flat face of the pier above. This is frittered away with stop-chamfered edges, and a vast panel cusped at the four corners. Then follows a cornice of classical character continuing the raking steel cornice over the arches, and the pier parapet has three small panels in it bearing no relation to the large panel below. The "ornamentally steel-faced" arch has a spandril surrounded by a huge bead containing cusped foils of an order too well known to us in advertisers' catalogues of their cast-iron vulgarities.

The parapet, also in cast-iron, must be drawn to be appreciated. It rivals in "gothic" the "moorish" of Battersea Bridge.



Our lot at present on the Thames is an unhappy one. We have hardly recovered from the architectural shock the Tower Bridge gave us, or from our horrors on beholding Hammersmith. Rennie's noble work at London Bridge is in process of being fussed and mauled to place electric light standards in the roadway. Kew Bridge has given way to steel; Sonning Bridges are condemned; Richmond Bridge is threatened. A few years ago we were seriously informed that Waterloo Bridge must soon be doomed. Our hopes for the preservation of the last remnants of what a better past had bequeathed to us grow visibly smaller, while the Bridges Committee of the London County Council, the dispensing authority in these matters in our midst, has shocked us effectually in all its ill-starred efforts.

When any department can be found to originate, and any collection of men to sanction the erection of such a nightmare as Hammersmith Bridge, can we hope with any confidence to rise above "ornamental facings" for Vauxhall or Lambeth? Yet surely if sufficient impetus can be given to a comprehensive expression of educated opinion, put forth by those influential bodies to which our arts and amenities should not be as naught, the Royal Academy and the Royal Institute of British Architects, for instance, enlightenment may perhaps come at last even to the Bridges Committee of the London County Council. It seems that urgent steps are needed lest it come too late.

W. D. Caröe.

Architecture and the Royal Academy.

A DISCUSSION.—III.

BY BASIL CHAMPNEYS.

It is Cicero, I think, who describes the Roman Augurs as winking to each other when they meet. I can easily imagine two architects, exhibitors of perspectives at the Royal Academy, similarly reciprocating a consciousness of the fraud which they would be perpetrating on the public, if the said public, contrary to its wont, put itself in the way of deception by entering the architectural room. From the chance of being thus deluded visitors preserve themselves, not so much by an instinctive caution, as by caring nothing for architecture, whether properly or improperly portrayed.

But though the public thus escapes this particular snare it is still, by the very fact that architectural exhibitions under the auspices of the Royal Academy is practically limited and ornamental drawing, fortified in the delusion that architecture means draughtsmanship.

Architecture really means nothing of the kind. It is simply and solely the art of producing convenient, stable, and beautiful buildings by whatever means. Drawing is a means to this end which is found generally convenient. Draughtsmanship is the art of making an image of a

building attractive, whether in conformity with actual design or not.

I said that drawing is a means usually found convenient. It is not essentially necessary. It is quite possible to imagine a method by which a building might be carried through without the use of pencil or paper. If any one chose to peg out his ground-plan on the actual site; to set out the further particulars needed on boards; to cut his own templates, and to model in clay his detail and sculpture—if he did all this to a satisfactory result, he would be not less, rather, I think, more entitled to call himself an architect than one who used to the fullest extent the paraphernalia of drawing, though there would obviously be nothing to speak for the work except the result.

In the ordinary practice of architecture, though drawing is lavishly used, there is nothing to show for a building on paper that can be understood or appreciated by the public. Working drawings are serviceable in the precise degree in which they are unornamental. They are the better for being disfigured by figured dimensions and notes, and adventitious adornment of every kind is dangerous, as likely to mislead the designer from the only considerations which are essential. In an office that is not over-staffed the bulk of them are rarely developed beyond the pencil stage, and it constantly happens that out of a multiplicity of drawings no one is for practical purposes brought to an exhibitable stage.

It often happens that a client asks for some drawing which he can understand, and in this case a diagram or perspective may be needed to enable him to realise the grouping and other conditions which he may not be able to gather from the practical drawings; and the architect may possibly himself be glad of the opportunity to study his design in a new form of presentment; though the less illusive this is made the better it is for both client and architect;—for the architect, lest he become unduly enamoured of his design, and for his client, lest he find the result fall short of the expectation fostered by seductive draughtsmanship. Burges once remarked about a fellow architect that it was "a pity he could not build his cross-hatching," and a client may be disappointed in the result, anticipation having been pitched too high by the artifices of drawing. So that it is wiser that even for this purpose perspectives should not be too pretentious, and should fall short of the exhibition standard.

It follows from what I have said that perspective exhibition drawings are and should be altogether outside an architect's practice. They are made specially for a purpose extraneous to the art; and, being curbed by no practical restraint, allow draughtsmanship to romp in, with its illusive tricks of sky, wagons and horses, and groups of figures. It is notorious that they form no fair criterion of the merits of the actual work, and may be equally calculated to make a poor design unjustly attractive and to reduce a good one to mediocrity.

The alternative of exhibiting geometrical drawings is better than this, no doubt. Even they, however, have to be specially manufactured, and are still open, though in a less degree, to the abuse of adventitious amenities. Moreover, they are essentially "*caviare* to the general," and would entirely fail to interest the lay visitor, if, contrary to experience, any such were to be found.

On the whole, I think that it would be best for the art of architecture if architectural exhibitions were abolished. Reputations would then be based exclusively on executed work, the only real criterion of power. If, however, exhibitions must be retained, it appears to me that photographs of executed work are the only legitimate form of representation. They cannot well imply merits which are non-existent. The chances are that they will do less than justice to their subjects. At any rate they will establish an even standard of judgment, and there will be no chance of an architect's reputation being gained by the seductive draughtsmanship of an assistant.

BY BERESFORD PITE.

I CONFESS to looking forward through the winter months with a growing eagerness, difficult alike to justify or repress, to the opening day of the only exhibition room of current architectural design and draughtsmanship in London. In common with brother exhibitors I may indulge in general and particular criticisms and dissatisfaction, and in company with the world at large feel the depressions of reaction after the violent excitements of the galleries where impressionist brush work and all the resources of the palette reign; but, in spite of all this, the fact that this room is the representative exhibition of our architecture in draughtsmanship exercises a sympathetic influence, akin at once to affection and pity upon my mind.

I have long thought that architects should periodically exhibit working drawings, details of executed buildings, and illustrative drawings such as those prepared for competitions. There can be little doubt that if every year the premiated and some other selected designs from every architectural competition were exhibited in complete sets and series, a fine representation of current progress in design and draughtsmanship would be obtained. All the material will exist ready to hand, no special drawings would have to be made, the interest and value of the exhibition to archi-

tects, promoters of competitions, and their constituents would be indisputable, and the indirect influence on the competition question, in bringing all results and awards up to an annual exhibition for a period of comparison and criticism, would both stimulate the competitors and give added responsibility to assessors and promoters.

In addition to this very considerable mass of exhibits, the illustration of other building works by geometrical drawings in complete sets, with photographs, is eminently desirable, and should be not merely encouraged but required; and there would still remain the miscellaneous subjects illustrated by perspectives and other drawings which compose the bulk of the usual exhibition at the Royal Academy.

It is very probable that such an exhibition of the year's architecture, though reduced through selection by the Council, would demand the wall space of two or three galleries instead of the one now found more than sufficient. The exhibition having ceased to be solely of pictures and become one of architectural drawings, though no less one of "works of art," the demand for gilt and glass might be dispensed with, and it may indeed be suspected that this requisition accounts for the singular position of the present architectural exhibition.

The need of increased space and the infallible doctrine of frames probably alone now actually prevent the development of the architectural room into a more truly representative and interesting exhibition; but this is a problem which the Royal Academy can alone deal with by winter exhibition or by any other means which may be acceptable or practicable to its Council or General Body. We may represent, however, to them, in the interests of architects as a body, that, admitting alike the partial interest of the usual exhibition and the difficulties that the subject of the exhibition of architecture with works of painting and sculpture presents, there is a real necessity for great improvement in the character and quality of the work exhibited, which appears to be due to the universal application of the restrictions as to glazing and framing. Architectural plans properly mounted on narrow-margined strainers should be admitted, and sufficient space assured for complete sets of drawings, both of competition designs and of executed buildings.

A few points, more or less disconnected, in conclusion:—

In the present distress I think the value of the recognition in a public exhibition of the fact that architecture has claims upon the attention of the intelligent, and that private works of architecture, as well as public, have a general interest as forming part of the expression of our national life, and are illustrated and exhibited as such, is of considerable importance.

In the present temper of Government and of public bodies it would be unwise for architecture to withdraw herself from the most important of the few platforms upon which she claims—though vicariously and incompletely—to be essential to national art.

This little Architectural Room, cool and unattractive amid the warmth and glories of the picture galleries at the Royal Academy, represents to the ordinary Briton an important principle, as otherwise he cannot explain its perpetuation in spite of unpopularity.

Mr. Norman Shaw's long and interesting article is, we all hope, significant of the existence of much of which some were in great doubt. The action of the Council in selecting and of the "poor hanger" in executing the hanging of the works can only be criticised as to their rejections and returned works by separate instances; all the accepted only are in evidence. Mr. Norman Shaw has never lacked courage in artistic expression, but, in spite of the valorous way in which he cuts the knot of complaints, I have been painfully under the impression that most people concerned suggested that good designs were rejected and bad ones placed on the wall, though I have often found myself unable to concur with complainers upon any group of examples. Varnishing day in the Architectural Room is principally amusing from the variety and tenour of the candid criticisms of the exhibitors themselves upon their neighbours' exhibits, and upon the "poor hanger."

The Council with considerable frequency accept a drawing on the second or third time of asking—I suppose, moved by pity to love. I possess a small architectural drawing by a friend sent four or five times and hung at last, and know of another sent incessantly and rejected until a figure poking the fire—it was an interior—was scratched out.

Mr. Norman Shaw asks if no one in England now cares to expend two months on a fine drawing. At the request of a friend I once spent all three months on making a drawing for the Royal Academy exhibition only, in a method not suited for mere reproduction. This painful work made two annual pilgrimages to the Royal Academy and was promptly returned each time. I am conscious that if this drawing was sent now, Mr. Shaw's plea for laboriousness alone would ensure it attention in examination, and the qualities of its design, that was not mine, would ensure its exhibition.

We have all too, it seems, been under a mis-

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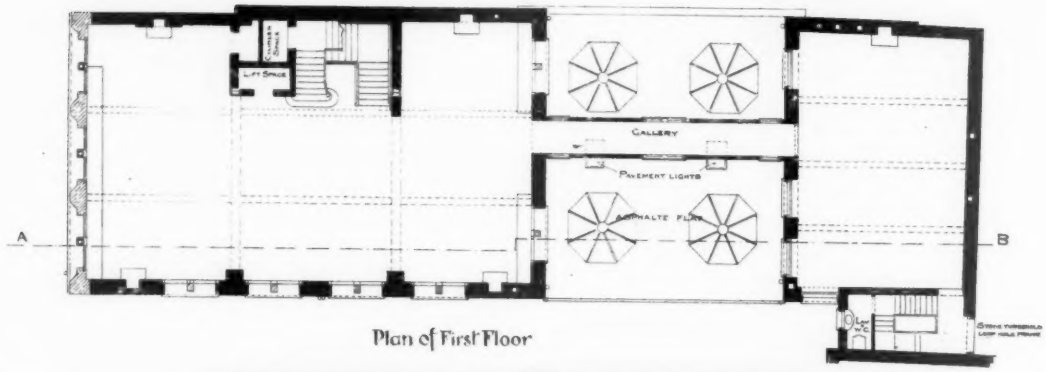
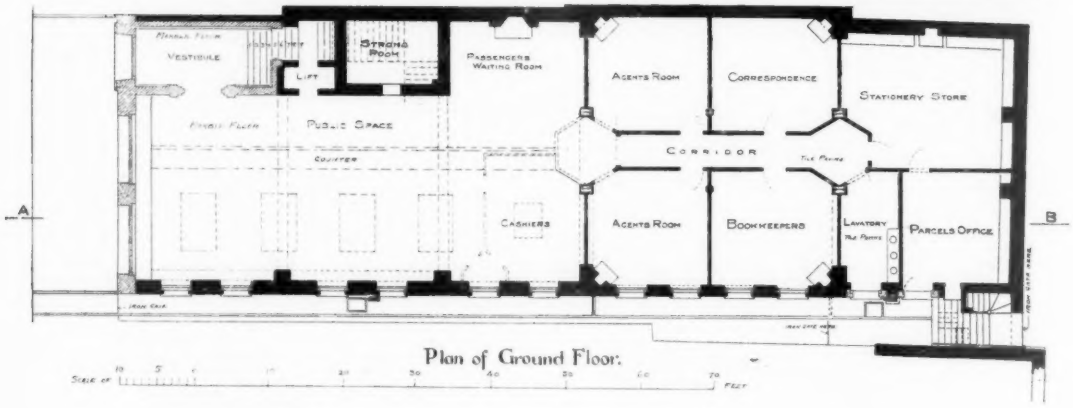
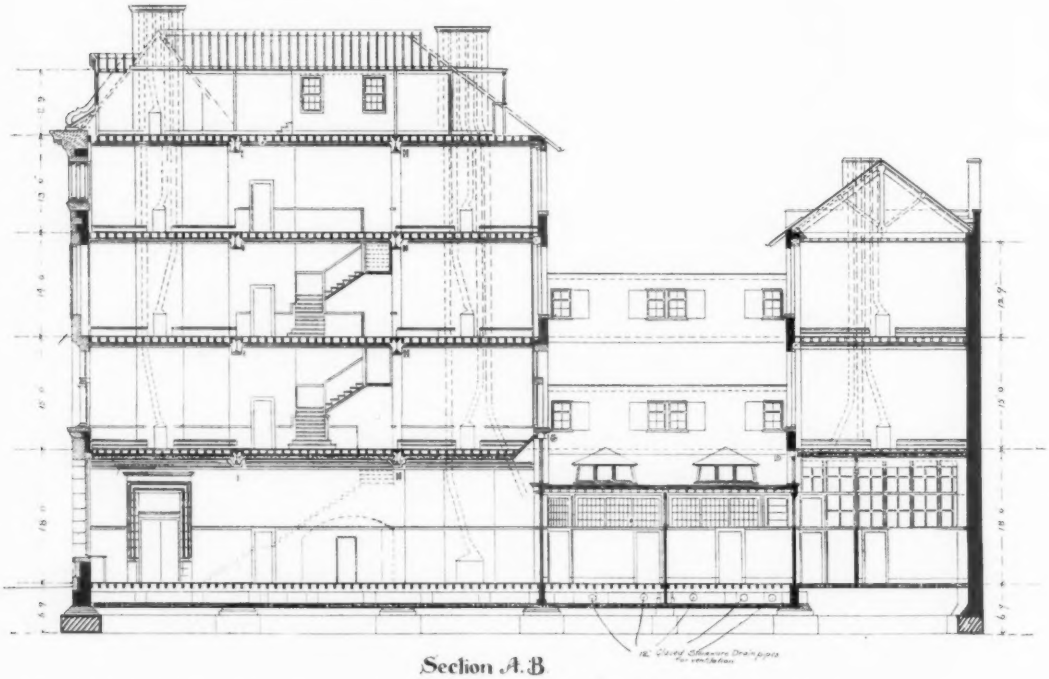


Plan of First Floor



Plan of Ground Floor.



Section A.B

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W. DUNN AND R. WATSON, ARCHITECTS.

taken tradition as to the size of drawings and the amount of space available. When the architect Academician responsible for the hanging about three years ago told me that my only exhibit had run the direst risk of exclusion on account of its great size—it was a moderate frame with three narrow upright perspectives in it—I believed the tradition to be general and authoritative; but it proves, of course, to have been only exceptional and not of general application.

I fear that I have dropped into the grumbling which is unreasonable because natural; but, in spite of the waywardness of Fanny, there is already moving me that lambent eagerness of spirit for next spring which the poet mistakes for a symptom of the time of love.

Current Architecture.

OFFICES OF THE UNION CASTLE COMPANY, ADDERLEY STREET, CAPE TOWN.—This building has been erected for Messrs. Donald Currie & Co. The whole of the ground floor and most of the upper floors are to-day occupied by the Union Castle Company as offices. The building is of brick, faced with Palmeit River stone, in Adderley Street, and with cement rough cast elsewhere, Cape Town bricks being of very inferior quality. The building which stood formerly on this site had a portico or verandah the full width of the pavement and frontage, supported by fluted Doric columns of stone, with a regular entablature and balustrade. As originally designed, this building had a similar portico in front, to give shade to the ground floor and to foot passengers. The city authorities, with truly British perversity, declined to permit of any new columns of a greater diameter than eight inches, which would only give the type of verandah seen in the photograph on either side of the Castle Company's premises. The Company decided that it would be better to have no verandah than a cast-iron one. The internal arrangements of buildings of this class are so frequently changed with the growth of business, that it is necessary to form large open spaces with as few internal supporting walls and as many windows as practicable, to permit of future alterations being made without interference with the structure. Accordingly, we have a large open ground floor so formed that all the interior partitions could be removed, without the insertion of a single shore to the superstructure. To this end steel is largely used. All the steel used in the colony is imported. The roofs are slated with an American slate, the lathing is of expanded metal throughout, and the lift is worked by hydraulic pressure. Messrs. W. Dunn and R. Watson were responsible for the design of the building, and Mr. Herbert Baker, of Cape Town, for the general supervision.

Books.

THE ARCHITECTURE OF BATH.

"The Eighteenth Century Architecture of Bath." By Mowbray A. Green, A.R.I.B.A. Part I. Bath, George Gregory, 1902. Price per part, 10s. To subscribers, 7s. 6d. Advance subscription, 30s. for four parts, including binding.

In April, 1901, a paper was read at the fortnightly meeting of the Architectural Association which aroused considerable interest among those best acquainted with the beauties of Bath. It was by Mr. Mowbray Green, and gave at once such a different account of the subject from that usually current, and such an impression of accurate and first-hand knowledge, that Mr. Green's recent announcement of a complete treatise, to be issued in four parts, has been very warmly received. There are many reasons why a trustworthy account of the buildings of this beautiful city should be welcome. For a long time it seemed as if good architecture had become extinct in the headquarters of the trade in oolite. Bath stone was used everywhere except in Bath to produce fine buildings. As lately as in the last ten years of the nineteenth century it was credibly reported that architectural taste was dead in the place which Inigo Jones, Burlington, the two Woods, and Baldwin had embellished. Since then, as has been fully recorded in these pages, Bath, by an effort which caused much local controversy and many searchings of heart, awoke from its long indifference to the claims of art. Not only did it afford space and opportunity for the genius of Brydon, but the citizens began to ask about its associations. The volumes published of late years upon the memorable inhabitants and their dwellings have been numerous, and, in addition, an admirable map has been prepared and issued to guide the visitor to historic residences. If it has been reserved for Mr. Green to place the researches thus indicated upon a scientific base, and if the remaining numbers of his work are as complete as the first, we may expect not only a great increase in our knowledge, but, for those, and they are many, who need a guide to the

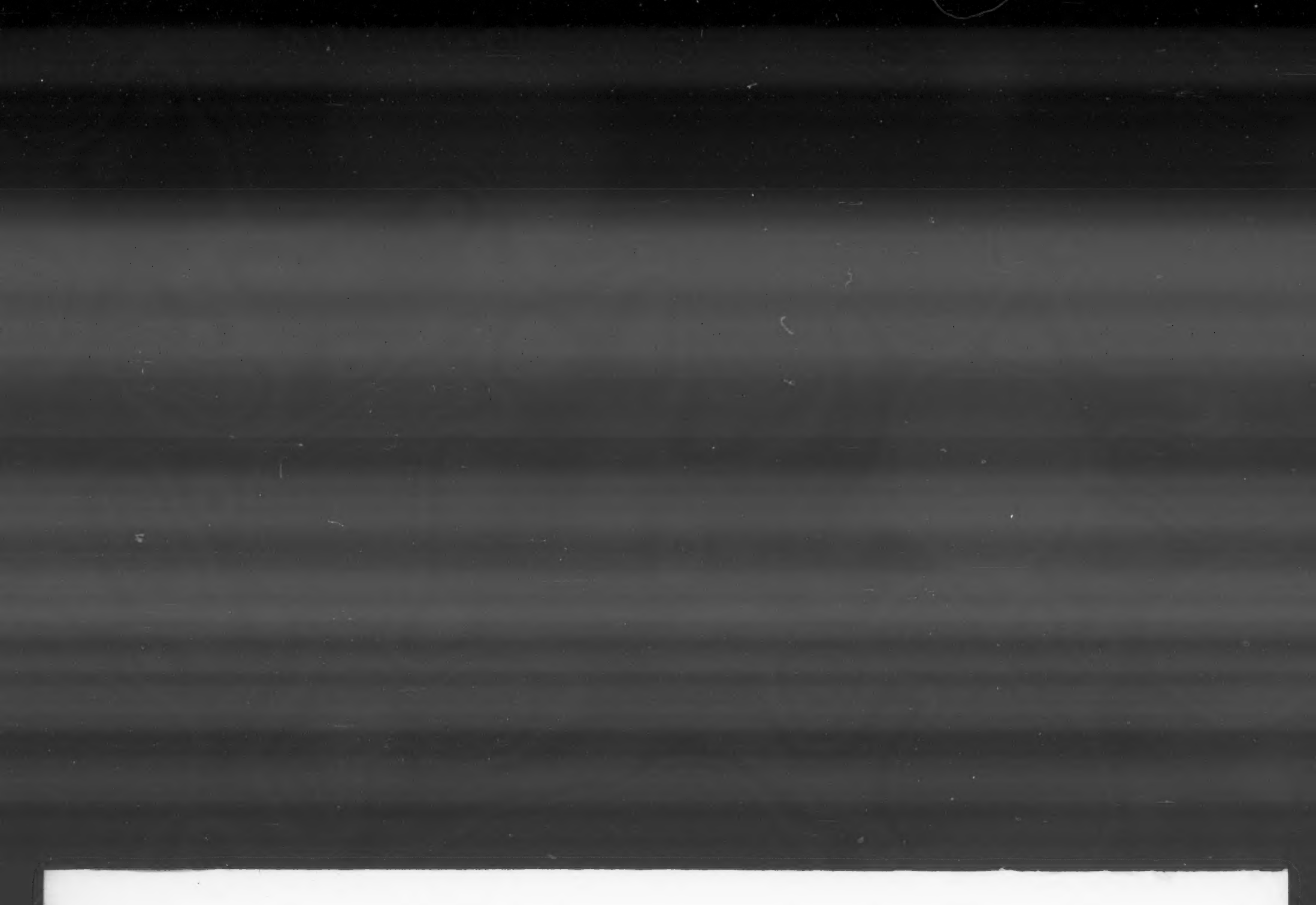
objects worthy of admiration, a great increase also in the attractions which Bath holds out to the visitor.

Geologists have noted that the formation which in the Middle Ages distinguished Normandy, and was known to the thirteenth-century builders as Caen stone, was represented in our island by a similar stratum. Entering at or near Portland it crossed the kingdom diagonally and made its exit near Lincoln. Along this line most of the great buildings of that period are to be found. The ancient church of St. Lawrence at Bradford in Wilts is upon it, and the fine towers of Raunds and Barnack and Stamford. Salisbury, Lincoln, and other famous cathedrals are either upon it or where easy water carriage made the oolite available. Both Oxford and Cambridge were thus favoured, and the great abbeys of Yorkshire partook of its benefits. During all these ages the chief modern quarries were untapped. Bath was little better than a village, and even in the time of Queen Elizabeth, though the local stone was largely used in all the districts mentioned above, and Longleat, Cranborne, Montacute, Chalfield, and other fine houses were being built in the surrounding districts, it had attained no special celebrity except for its perennial hot springs. The Tudor Queen enlarged the old boundaries of the city, taking in places which bear such descriptive names as the Wall Cote, the King's Mead, the Vine Yard, besides the field in which the wells were situated and the Ham, the Anglo-Saxon settlement or home, once called, more by chance than any intention, Akeman's Chester. Bath had not greatly increased or improved when it obtained the patronage of another Queen, Anne, who with Prince George, visited it more than once at the beginning of the century of whose architectural triumphs Mr. Green treats. The Bath waters became famous and so continue. The Bath stone won its way more slowly, but since Brunel in his Box tunnel at Corsham demonstrated the accessibility and inexhaustibility of the supply, it has been in rapidly-growing demand, not only here, but abroad, and even at the Antipodes.

Meanwhile, Bath was lucky in securing as citizens such men as Postmaster Allen, celebrated by Pope; Wood, the best architect of his date; and Nash, a fop who, in spite of his follies, was able to attract the fashion of the day—none of them natives of the place. Mr. Green describes first the small beginnings on which Allen improved. The present instalment gives us views of houses long forgotten, though still in many cases existing, and enables us to recognise certain characteristic features, string courses, mouldings, window frames, which in further researches will furnish us with useful notes as to date.

Among these, many visitors will be interested to find the charming little front of a house in Trim Street, which seems to have been erected for General Wolfe, who was much in Bath before his victory and death at Quebec. Another house, usually attributed to Lord Burlington (*pace* Mr. Blomfield), is carefully figured and described. It was pulled down during the period of architectural indifference mentioned already, to make a better approach to one of the modern eye-sores for which that period is responsible. A third and most interesting building is still standing, but is not very easy to find. This is the town residence of Ralph Allen. To see it we descend from the main street near the Athenæum into Lilliput Alley, between two houses, and there, at the bottom of a sharp slope, which shows how greatly the modern level has been raised, is the "basement storey sustaining a double storey under the crowning," which Wood, in his *Description*, calls "a sixth-rate house"; for he divided his designs into classes, "first-rate" being the lowest, "and so on to the largest and most ornate, which was called sixth-rate." This front is so placed that Allen could see from his windows the lofty down at the other side of the valley and the Sham Castle which he had placed on its summit. The present part of Mr. Mowbray Green's work concludes with careful elevations, plans, sections, details, and photographs of Widcombe House. This lovely villa was built for Philip Bennet, M.P., in 1727, and is often, for its beauty, attributed to Inigo Jones, or his successor Webb. As Mr. Green observes, it may have been built by Greenway, about whom he has unearthed some curious particulars, and have been designed by Wood. It would be only too easy to follow Mr. Green into the many enquiries he institutes as to early Bath architecture; but for these particulars it will be best to refer the reader to the book itself, as some acquaintance with the topography of the city will be needful: but one interesting circumstance should be mentioned. In beginning, as Mr. Green does, with the early architecture of Bath, he omits more than a passing reference to the so-called Gothic style, and confines his remarks to examples of Palladian. In thus treating his subject, however, he neglects no ancient features of importance, for no mediæval architecture, except the Abbey Church, remains in the city. The church is in the very latest possible pointed style, and has both of late years and in the last century been so thoroughly "restored" as to have few, if any, genuine Gothic remains left; while it is noteworthy that there is hardly any village in the neighbourhood—Corsham, Bradford, Charlcombe, Norton, South Wraxall, for instance—which does not boast a greater wealth of examples of mediæval art. The architecture of Bath is that of the elder Wood and his successors, and in bringing his first number to a conclusion by restoring the credit of Widcombe Manor House to that great man, Mr. Green enlists our sympathies on behalf of the artist who, it is evident, will be the hero of his book.

W. J. Loftie.

CORRECTION.

In the second article on the life and work of Charles Robert Cockerell, R.A., published in our October issue, by a slip of the author, which we overlooked, the illustration on page 139 appears as a design for the Fitzwilliam Museum, Cambridge. It is, of course, the first design for the University Library, the final design being given on page 133 of the same issue.